

OCTOBER 1956

VOLUME 2 - NUMBER 10

# CONSTRUCTION REVIEW

*C41.20/3*  
Featured in this issue . . .

**RENEWING  
AMERICA'S CITIES**

**ESTIMATING DEMAND  
FOR WARM AIR FURNACES**

- *Expenditures*
- *Starts*
- *Materials*
- *Awards*
- *Permits*
- *Costs*
- *Employment*



UNITED STATES  
DEPARTMENT OF LABOR

UNITED STATES  
DEPARTMENT OF COMMERCE

DOCUMENTS



Duke University Library

**U. S. DEPARTMENT OF COMMERCE**  
Sinclair Weeks, Secretary

**U. S. DEPARTMENT OF LABOR**  
James P. Mitchell, Secretary

**U. S. DEPARTMENT OF COMMERCE**  
FIELD OFFICES

ALBUQUERQUE, N. MEX.  
321 Post Office Bldg.

ATLANTA 23, GA.  
50 Seventh St., NE

BOSTON 9, MASS.  
U. S. Post Office and  
Courthouse Bldg.

BUFFALO 3, N. Y.  
117 Ellicott St.

CHARLESTON 4, S. C.  
Area 2  
Sergeant Jasper Bldg.

CHEYENNE, WYO.  
307 Federal Office Bldg.

CHICAGO 6, ILL.  
226 W. Jackson Blvd.

CINCINNATI 2, OHIO  
422 U. S. Post Office  
and Courthouse

CLEVELAND 14, OHIO  
1100 Chester Ave.

DALLAS 22, TEX.  
1114 Commerce St.

DENVER 2, COLO.  
142 New Custom House

DETROIT 26, MICH.  
438 Federal Bldg.

HOUSTON 2, TEX.  
430 Lamar Ave.

JACKSONVILLE 1, FLA.  
425 Federal Bldg.

KANSAS CITY 6, MO.  
Federal Office Bldg.

LOS ANGELES 15, CALIF.  
1031 S. Broadway

MEMPHIS 3, TENN.  
212 Falls Bldg.

MIAMI 32, FLA.  
316 U. S. Post Office Bldg.

MINNEAPOLIS 1, MINN.  
319 Metropolitan Bldg.

NEW ORLEANS 12, LA.  
333 St. Charles Ave.

NEW YORK 17, N. Y.  
110 E. 45th St.

PHILADELPHIA 7, PA.  
1015 Chestnut St.

PHOENIX, ARIZ.  
137 N. Second Ave.

PITTSBURGH 22, PA.  
107 Sixth St.

PORTLAND 4, OREG.  
217 Old U. S. Courthouse

RENO, NEV.  
1479 Wells Ave.

RICHMOND 19, VA.  
1103 East Main Street

ST. LOUIS 1, MO.  
910 New Federal Bldg.

SALT LAKE CITY 1, UTAH  
222 S.W. Temple St.

SAN FRANCISCO 11, CALIF.  
555 Battery St.

SAVANNAH, GA.  
235 U. S. Courthouse and  
Post Office Bldg.

SEATTLE 4, WASH.  
909 First Ave.

**U. S. DEPARTMENT OF LABOR**  
BUREAU OF LABOR STATISTICS REGIONAL OFFICES

ATLANTA 23, GA.  
50 Seventh St., NE

BOSTON 10, MASS.  
18 Oliver St.

CHICAGO 3, ILL.  
105 West Adams St.

NEW YORK 1, N. Y.  
341 Ninth Ave.

SAN FRANCISCO 11, CALIF.  
630 Sansome St.

Construction Review is prepared under the direction of

Walter W. Schneider, Chief  
Construction Statistics and Economics Branch  
BUILDING MATERIALS AND CONSTRUCTION DIVISION  
BUSINESS AND DEFENSE SERVICES ADMINISTRATION  
U. S. DEPARTMENT OF COMMERCE

Arnold E. Chase, Chief  
Division of Construction Statistics

BUREAU OF LABOR STATISTICS  
U. S. DEPARTMENT OF LABOR

*Inquiries on the content may be addressed to Construction Review, in care of either agency.*

# CONSTRUCTION REVIEW

## CONTENTS FOR OCTOBER 1956

	PAGE
AT A GLANCE .....	2
FEATURES:	
Renewing America's Cities .....	4
Estimating Demand for Warm Air Furnaces .....	10
Expenditures for Maintenance and Repairs in 1955 .....	14
STATISTICAL SERIES:	
Part I --Construction Put in Place .....	15
Part II --New Housing .....	20
Part III --Building Permits .....	24
Part IV --Contract Awards .....	32
Part V --Costs (Indexes, Materials Prices, and Wage Rates) .....	34
Part VI --Materials .....	37
Part VII--Employment .....	45
Explanatory Notes (Omitted from this issue)	
Index to Tables .....	Inside back cover

CONSTRUCTION LEGISLATION (Published when Congress is in session;  
last shown in September 1956 issue.)

CONSTRUCTION REGULATIONS..... 51

NOTE: Contents of this publication emanating from governmental sources are not copyrighted and may be reprinted freely. Mention of Construction Review as the source will be appreciated. Data credited to private sources appear here through special arrangements and are still subject to the copyrights of the compilers.

CONSTRUCTION REVIEW is for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Subscription price per year--\$3 domestic; \$4 foreign. Single copies, at 30 cents each, may be purchased from any of the Department of Commerce Field Offices or the Bureau of Labor Statistics Regional Offices.

Use of funds for printing this publication approved by the Director of the Bureau of the Budget (December 16, 1954).

## At a Glance

**CONSTRUCTION ACTIVITY IN SEPTEMBER**--New construction outlays exceeded \$4.2 billion for the third consecutive month in September, bringing the third-quarter total to nearly \$12.8 billion--the highest quarterly figure recorded. New monthly highs were set in September for office building and churches, and private industrial building continued its record-breaking pace to reach a peak quarterly figure of more than \$800 million. Private residential building held steady during the third-quarter months, but its total for that period (\$4.3 billion) was 10 percent below the quarterly record set in July-September 1955. Total public construction expanded this September to another new high, with a monthly record again established for highway construction.

**HOUSING STARTS IN AUGUST**--Nonfarm housing starts in August held steady at the 101,000-unit July level. Privately owned starts (accounting for almost all the August total) showed a slight increase from July and were at a seasonally adjusted annual rate of 1,110,000 in August, compared with 1,070,000 for the preceding 2 months. The total of 783,000 units (private and public) begun during the first 8 months of 1956 was about a fifth below last year's high figure for the same period, but was approximately the same as totals for the same months of 1951-54.

**FHA-VA ACTIVITY IN AUGUST**--Nonfarm housing begun under FHA programs increased 6 percent in August (reversing a 3-month downward drift), but VA starts continued to decline. Comparing totals for the first 8 months of 1955 and 1956, both FHA and VA starts were down 31 percent this year--accounting for almost all of the overall drop in privately owned new housing. The total of mortgage loan requests to FHA and VA for proposed new housing was up slightly from July to August--reflecting a 5-percent increase in VA appraisal requests and a 2-percent decline in FHA applications.

**NONFARM MORTGAGE RECORDINGS IN JULY**--The value of nonfarm mortgage recordings declined slightly from June to \$2,374 million in July, with decreases shown by all major types of lenders except mutual savings banks and the miscellaneous group (chiefly real estate and mortgage companies). Mortgages written this July totaled 4 percent less than a year earlier; the only group continuing to show greater activity than in 1955 was comprised of individuals. Mortgages written during the first 7 months of 1956, totaling \$15.9 billion, were down 3 percent from the like 1955 period--a decrease influenced largely by over-the-year declines in lending by savings and loan associations and insurance companies. Commercial banks and individuals were the only major lending groups to show increases from January to July 1955.

**BUILDING PERMIT ACTIVITY IN AUGUST**--Building permit valuations totaled the same in August (at \$1.7 billion) as in July--with increases for stores and dwelling units balancing out the declines reported for other kinds of new building. The \$13.2-billion total for the first 8 months of 1956 almost equaled that for the same 1955 period because of this year's gains in major nonresidential building types. Dwelling-unit valuations thus far in 1956 (totaling \$7.3 billion) were down 12 percent from 1955--reflecting a 19-percent drop in the number of dwelling units for which permits were issued.

**PUBLIC CONTRACT AWARDS IN JULY**--Public contract awards showed unusual strength in July--holding about equal to the high June total of \$1.1 billion. Continued gains for Federal conservation and development work, and for some State and locally owned projects (mainly water supply facilities, toll roads, and a large power project in the State of Washington), virtually offset the declines that occurred in other public works. For the first 7 months, the 1956 State and local total (\$5.0 billion) was up 16 percent from 1955, and the Federal total (\$1.3 billion) was up 38 percent; the only declines over this period were in awards for federally owned industrial, warehouse, and airfield construction, and State and locally owned utilities.



## At a Glance

**CONTRACT AWARDS IN 37 EASTERN STATES IN AUGUST**--The value of construction contracts in the 37 States east of the Rocky Mountains declined for the third consecutive month with an August total of approximately \$2.1 billion. Nonresidential building awards in August fell off by 12 percent marking the sixth time in 1956 in which a monthly decline for this type of award took place. Residential awards, however, in a reversal of the recent trend increased by 15 percent. The one-fifth reduction in public works contracts, the largest month-to-month percentage drop this year, resulted in an 18-percent downward movement of engineering type of awards in August. Despite the recent downturn, the awards total for each major type of construction was higher this August than for August of last year. Similarly, for the first 8 months of 1956, the value of contracts in each major category exceeded the value in the comparable period last year, with the largest gains shown by utilities and public works.

**CONSTRUCTION COSTS IN AUGUST**--The August composite cost index of the Department of Commerce rose to a new high at 132.1 percent of the 1947-49 average. This was 5 percent above the level of August 1955. The index for each month in 1956 has shown some upward movement reflecting increases in many cost elements. The latest rise of almost 1 percent was probably strongly influenced by the recent steel price increases.

**BUILDING MATERIALS PRICES IN AUGUST**--The wholesale price index for building materials rose nearly 1 percent from mid-July to a record 131.6 in mid-August, primarily because of higher prices for steel products. Increases amounted to 9 percent for nails, 8 percent for structural shapes and reinforcing bars, 6 and 8 percent for metal pipe, and 5 percent for metal windows. Aluminum sheets followed the trend, rising almost 5 percent over the month. These increases were partly offset by lower prices for lumber and wood products, particularly softwood plywood and Douglas fir lumber. The 4-month decline in lumber prices, though partly seasonal, also reflects lagging demand because of this year's lower rate of housing starts. The August 1956 index for all building materials was up 3 percent from a year earlier.

**CONSTRUCTION MATERIALS OUTPUT IN JULY**--Output indexes for most major construction materials showed normal seasonal movements in July. For Portland cement, asphalt products, and clay construction products, production reached the highest level ever attained for that month. These were also the groups which showed very small changes from the high levels of June. Millwork, the only category for which output was below that of July of last year, declined more than any other group from June 1956 (17 percent). Production of gypsum products reached an alltime peak during the second quarter, when its index rose to 188.6 percent of the 1947-49 average level. This represented the ninth consecutive increase in quarterly output.

**CONTRACT CONSTRUCTION EMPLOYMENT IN AUGUST**--The number of workers on contractors' payrolls expanded about seasonally in August to another new high of 3,345,000, or 257,000 above the August 1955 figure. State and area data available through July show that in a majority of places employment was up from June (though increases generally were small), and continued to exceed the year-ago level. Of the 8 States reporting more than 100,000 contract construction workers this July, all showed increases over July 1955 except Pennsylvania and Ohio, where only slight declines were noted.

**HOURS AND EARNINGS IN JULY**--Average weekly earnings in contract construction were \$103.09 in July, down by 16 cents from the alltime high of June, because of a slight reduction in weekly hours. Hourly pay averaged a record \$2.72 in July, or 13 cents above the July 1955 figure. Over-the-year gains in weekly earnings amounted to \$4.41 for the industry as a whole, and ranged from \$4.00 on building construction to \$5.47 on nonbuilding.

# Renewing America's Cities

J. W. FOLLIN\*

With the enactment of the Housing Act of 1949, the Federal Government for the first time was in a position to extend financial aid to communities for the clearance of slums and blighted areas that had long been accumulating. Passage of this legislation by the Congress followed more than 4 years of congressional study leading to the conclusion that Federal financial assistance was essential if progress were to be made by communities and private enterprise in overcoming the obstacles that had blocked the clearance and redevelopment of slum areas on any sizable scale in the past. The Federal aid authorized in Title I of the Housing Act of 1949 is of three types: (1) Advances of funds to make the necessary surveys and plans;<sup>1</sup> (2) temporary loans to give the community working capital;<sup>2</sup> and (3) capital grants to absorb up to two-thirds the cost to a city of buying blighted land, clearing it of its deteriorating structures and other blight, and preparing it for redevelopment.<sup>3</sup> For this purpose, Congress authorized \$500 million in capital grant funds and \$1 billion in loan money.

The Nation's communities responded quickly, recognizing in the act a way out of the civic dilemma that was increasing steadily in intensity. At the end of June 1956, 7 years after the passage of Title I, 232 cities had applied for and been granted Federal assistance in clearing their slums. More than 375 separate projects were under way with assistance administered by the Urban Renewal Administration. Almost the entire \$500 million authorized for capital grants had been either allocated or reserved by the middle of 1955. Congress, in the Housing Amendments of that year, increased the total authorization to \$1 billion, of which more than \$650 million was committed at the end of fiscal 1956.

## 1954 HOUSING ACT--URBAN RENEWAL

In the meantime, Congress had passed the Housing Act of 1954, which, in amending the 1949 Act, made the Title I program at once more comprehensive and cohesive. It was early evident that slum clearance alone was not enough. In some cities, new slums were forming faster than old ones could be cleared. In others, the obvious eyesores were being torn down, but little was being done about correcting conditions that lead to slums and blight. What was needed was a program to prevent as well as clear slums--one that would encourage rehabilitation of areas on the downgrade, but still capable of being saved for a long economic life.

Acting on the recommendations of his Advisory Committee on Housing Policies, President Eisenhower, in January 1954, called on Congress for legislation to implement such a program. Congress responded with the Housing Act of 1954, which amended the 1949 Act to provide for a new approach to the problems of urban deterioration through use of a wide range of community, private, and Federal resources in a strongly unified effort. This new approach is called urban renewal.

The 1954 Act provides that communities can include within project boundaries not only those hopeless areas for which total clearance is the only solution, but also those moderately blighted residential structures and neighborhoods that can be brought up to standard by conservation and rehabilitation techniques. Thus, slum clearance and urban renewal projects under Title I can now embrace areas that need total clearance, total rehabilitation, or a combination of both.

\* J. W. Follin, who was Commissioner of the Urban Renewal Administration, Housing and Home Finance Agency, when this article was written, recently resigned. Richard L. Steiner is now Acting Urban Renewal Commissioner.

<sup>1</sup> These are short-term Federal loans, repayable with interest from funds becoming available to the local public agency for undertaking the project.

<sup>2</sup> These loans, repayable with interest, are used by the community as working capital in acquiring slum land and structures, clearing the site, and preparing the area for redevelopment or rehabilitation. The local public agency may pledge its rights under a loan contract as security for the repayment of borrowings, if obtainable at lower interest rates, from sources other than the Federal Government.

<sup>3</sup> When the area is ready for redevelopment or rehabilitation, land acquired is disposed of to private enterprise or to public bodies for its fair value for the uses called for in the urban renewal plan. The difference between the return received from land disposition and the total cost of carrying out the project is its net cost. The Federal Government agrees to pay up to two-thirds of this net cost. The city pays at least one-third either through cash contributions, or through land, public facilities, demolition, or other work contributed to the project operation.

The central element in the 1954 urban renewal legislation that integrates the various Federal aids and ties them closely to local and private efforts is the workable program. In its workable program, a city takes stock of its entire problem of slums, blight, and urban obsolescence. Then it sets forth a long-term program for attacking blight on all fronts and with every local aid the community can muster.

In preparing its workable program, a community must commit itself to the attainment, within a reasonable time, of specific objectives in each of the following seven broad categories:

1. Adequate local codes and ordinances, effectively enforced.
2. A comprehensive plan for development of the community.
3. Analysis of blighted neighborhoods to determine treatment needed.
4. Adequate administrative organization to carry out urban renewal programs.
5. Ability to meet financial requirements.
6. Responsibility for adequately rehousing families displaced by urban renewal and other governmental activities.
7. Citizen participation.

This new approach to civic problems emphasizes the principle that such a plan of action for and by the community is in itself a substantial first step toward healthy urban development. Because of the fundamental importance of this penetrating type of analysis, a workable program, approved by the local governing body and the Housing and Home Finance Administrator (HHFA), is a prerequisite to major Federal aids in the urban renewal program. Urban renewal projects initiated since August 1954 can qualify for capital grants, temporary loans, and FHA mortgage insurance<sup>4</sup> only after the city's workable program has been approved. In addition, low-rent public housing projects may not receive Federal assistance unless they have an approved workable program, under the Housing Act of 1956. Such approval is not required for projects initiated prior to August 1954. Also, planning advances are available while the workable program is being developed to help the community finance the surveys and other planning work necessary before actual site operations can get under way.

When review of a workable program shows that a community already has adequate resources for a comprehensive attack on slums and blight or will improve its facilities for this purpose within a definite period, the Housing and Home Finance Administrator approves the workable program for 1 year. When recertification is requested, the Administrator examines the community's progress toward its proposed objectives. If there is evidence of satisfactory progress—even though slower than originally scheduled—and of good faith by the community in attaining the objectives, the workable program is recertified.

As of June 30, 1956, workable programs had been approved for 106 communities. Programs for 17 had been recertified. Some 86 other cities were either preparing workable programs for initial submission or were awaiting HHFA processing of programs submitted.

#### URBAN RENEWAL PROJECT CHARACTERISTICS

Across the Nation, cities are engaged in clearing and rebuilding wornout areas, rejuvenating neighborhoods not yet so far gone as to require clearance, and mobilizing facilities to deal quickly with urban blight wherever it may threaten. In Pittsburgh, a project is under way in which almost 100 acres of slums and blight will be cleared in the Lower Hill Area to make way for new middle-income housing while providing space for a municipal auditorium, a symphony hall-opera house, and other community uses. Philadelphia, long a pioneer in careful urban planning, was the first city to complete a redevelopment project under the Housing Act of 1949. Seven other projects in Philadelphia are in various stages of planning and development—including the gigantic 3,000-acre Eastwick project, where redevelopment may provide new housing for more than 45,000 persons.

<sup>4</sup> See page 8.

Nashville and St. Paul are clearing the blight from around their State capitol buildings and devoting much of the land to new commercial uses. Birmingham is expanding its Medical Center into one of the greatest in the South. Little Rock is clearing two downtown slum areas, as well as an undeveloped outlying area for residential and industrial development. St. Louis has cleared the blight near its Union Station and is planning renewal of a vast tract to the west. Kansas City, Mo., has cleared a downtown "skid row" and is starting on two other areas close to the central business district. San Francisco will raze its Western Addition, where the fire was stopped in 1906. But its spectacular project is Diamond Heights, a rough, ill-fated area on top of a hill which can be replanned and re-ordered to support a residential area with shopping and public facilities. Boldness and vision are found on every hand in these city programs.

One of the most significant and comprehensive projects is planned in Cleveland, where the gamut of urban renewal techniques is being run in the vast "Garden Valley" area. Clearance and redevelopment activity will concentrate on a desolate, slag-filled wasteland, with plans calling for some 1,200 new units of private and public housing. In addition, some 400 existing homes will be rehabilitated under housing standards prepared specifically for the area. An existing industrial district will be somewhat enlarged, but will be clearly set off from the new housing.

### Status of Projects

A special survey of the 340 slum clearance and urban renewal projects under way with Federal assistance on December 31, 1955,<sup>5</sup> revealed that capital grants approved and reserved for these projects totaled almost \$554 million (see table). Temporary loans reached \$185 million. However, only \$27 million of the latter was outstanding because many cities use the Federal loan contract as security for borrowing working capital in the private market at interest rates below what the Federal Government has to charge.

STATUS OF URBAN RENEWAL PROJECTS<sup>1</sup> AND CAPITAL GRANT PROJECT RESERVATIONS, DECEMBER 31, 1955

Population group (1950 census)	Number of places	Number of projects, by status of last approval				Federal capital grant project reservations (thousands)
		Total projects	Project planning		Project execution <sup>4</sup>	
			Preliminary <sup>2</sup>	Final <sup>3</sup>		
All places.....	218	340	124	106	110	\$553,666
Places with population of:						
1,000,000 and over.....	5	43	18	2	23	188,882
500,000-999,999.....	12	27	8	7	12	156,930
250,000-499,999.....	12	21	6	6	9	45,040
100,000-249,999.....	38	64	22	23	19	85,398
50,000-99,999.....	38	51	21	17	13	32,774
25,000-49,999.....	28	39	14	18	7	16,831
10,000-24,999.....	45	53	22	21	10	18,234
Under 10,000 .....	40	42	13	12	17	9,577

<sup>1</sup> Projects authorized under Title I of Housing Act of 1949, as amended, including amendments in Title III of Housing Act of 1954.

<sup>2</sup> Preliminary planning includes identification of final boundaries of proposed project area; demonstration of eligibility under applicable Federal, State, and local laws; preliminary demonstration of economic feasibility.

<sup>3</sup> Final planning covers preparation of detailed project plans, cost estimates, and time schedules; satisfaction of requirements of all applicable Federal, State, and local laws; final preparation of application for Federal loan and grant assistance for project.

<sup>4</sup> Execution of final project plans as approved by the Housing and Home Finance Agency, including acquisition of sites, relocation of families, clearance and preparation of area for redevelopment or rehabilitation.

For 110 of the 340 projects, cities had been authorized to start assembling and clearing land. Land acquisition had actually started in 88 of these projects and was at least 90 percent completed in 56. Land disposition was under way in 25 areas, and 90 percent or more completed in 13. Planning was in the final stages on 106 projects, and preliminary plans were being made for the remaining 124 projects.

<sup>5</sup> Urban Renewal Project Characteristics, December 31, 1955, Housing and Home Finance Agency, Urban Renewal Administration.



### Location and Size of Communities

The 340 projects were located in 218 different communities in 29 States, the District of Columbia, Alaska, Hawaii, and Puerto Rico. In numbers of federally assisted urban renewal projects, the top 3 cities were New York City, Chicago, and Philadelphia, with 16, 14, and 8 projects, respectively, at the end of 1955. Of the 20 top cities in population in the country, 18 had at least 1 federally assisted project; only Seattle and Houston were not yet participating.

Urban renewal is not exclusively, nor even primarily, a big-city program, however. In fact, well over a third of the 340 projects under way at the end of 1955 were in communities of less than 50,000 population. A total of 95 projects were located in cities of less than 25,000 population and 42 were in communities of less than 10,000. The southern States, for example, are pioneering in demonstrating how small communities can benefit from urban renewal. Tennessee, alone, had 7 cities of less than 10,000 population in the program. One of these--Waverly--has fewer than 2,000 inhabitants.

The smaller communities have also shown that they are able to keep pace with the large cities in meeting the requirements for a well-rounded workable program. Of the 106 communities with approved workable programs in June 1956, almost three-quarters had populations under 250,000, and ranged downward to less than 2,000. Half of the total number were cities of less than 50,000 population. Five had fewer than 5,000 inhabitants.

### Types of Redevelopment Planned

Private housing will be the principal new use of the land in 123 of the 214 project areas<sup>6</sup> for which information on final plans was available at the end of 1955. Some private housing is also planned for 21 additional areas marked off primarily for other uses. Public housing will dominate 6 areas, with some public housing planned for a subordinate role in 9 others. In most of the areas visualized essentially as residential neighborhoods, some land will be set aside for shopping centers, public facilities (such as playgrounds, clinics, parks, and schools), and similar nonresidential uses. In the remaining areas, the land has been allocated almost entirely to nonresidential uses as follows: 34 areas predominantly or exclusively for industrial development, 33 for commercial, and 18 for public purposes.

### Relocation of Families

To qualify for Federal aid, project areas generally must have been slum or blighted residential areas prior to clearance. Of 215 projects which had progressed to the stage of either site operations or final planning<sup>7</sup> by the end of 1955, 193 were originally residential slums. Eight were blighted areas of other types. Twelve were predominantly open land, and 2 were completely open. These 215 projects encompassed 7,900 acres containing an estimated 107,000 dwelling units, at least 80 percent of which were substandard. Of the estimated 101,000 families housed in these dwellings, more than half were eligible for low-rent public housing because of their low incomes.

Federal assistance to local projects has, as one condition, a requirement that there exist a feasible plan for relocating in decent, safe, and sanitary housing the site occupants who must be displaced. As of September 1955, local public agencies had started relocating families from acquired land in 80 separate project areas in the United States and its territories. Of nearly 40,000 families living in properties acquired in these areas, 32,000 had already moved from the project sites. In Continental United States, relocation had started in 54 project areas in 31 cities, and 24,500 families had moved. Nonwhite families comprised more than two-thirds of the total involved in relocation efforts. About three families had relocated in private housing for each family in publicly assisted housing.

### PROGRESS WITH AIDS INITIATED BY 1954 ACT

In addition to stimulating communities to prepare comprehensive long-range plans for coping with local problems of slums and blight, the 1954 Housing Act introduced several programs to assist communities and individuals in effectuating urban renewal plans.

<sup>6</sup> Data on new land use not available for 2 of the 216 project areas shown in the accompanying table as approved for final planning or project execution.

<sup>7</sup> Data on the original character of the area not available for 1 of the 216 project areas shown in the accompanying table as approved for final planning or project execution.



### New FHA Mortgage Insurance

Since neither loan nor grant funds authorized for urban renewal can be used for actual construction or rehabilitation, financing of new housing and rehabilitation of existing residential structures in communities with urban renewal programs must come principally from private investment. To facilitate financing of such construction by builders, developers, and homeowners, two new mortgage aids were provided in Sections 220 and 221 of the 1954 Act.<sup>8</sup> These sections introduced government insurance of mortgages on houses and apartment buildings in deteriorated urban areas for the first time. The assurance that a community has a comprehensive workable program in force which will elevate residential values in designated areas makes these insurance programs feasible.

Section 221 authorized a new liberal FHA mortgage insurance aimed specifically at increasing the supply of rental or sale housing for relocation of families displaced by urban renewal activities referred to above. Section 221 insurance can be used for both new residential construction and the rehabilitation of existing homes. Although it is available only in cities having approved workable programs, properties eligible for Section 221 insurance need not be located within the boundaries of an urban renewal project area but may be anywhere in the locality. By mid-1956, the HHFA had certified 19 cities for Section 221 mortgage insurance, and applications are now being received under these certifications.

Under Section 220, FHA can insure mortgages for any new residential construction and for the purchase or refinancing of existing houses or apartment structures that are to be rehabilitated in an approved urban renewal area. By the end of June 1956, HHFA had certified 39 urban renewal projects as eligible for residential redevelopment and rehabilitation with the help of Section 220 FHA mortgage insurance. At that time, FHA commitments for new construction under this section totaled almost \$28 million for some 2,500 units in 9 project areas.

Because of the availability of the liberal Section 220 mortgage insurance, the refurbishing of old but good structures has a growing appeal to builders and individual homeowners in project areas. At the end of April 1956, 16 projects embodying rehabilitation had been approved for planning and at least 60 others were in the application stage. In some cases, as in Cleveland's Garden Valley project, the clearance and rehabilitation areas are sharply set off from each other. Others embrace only rehabilitation, with an occasional structure to be demolished. In either case, the city can credit site improvements and public facilities toward its one-third share of the project cost (see footnote 3, p. 4).

### Urban Planning Assistance Grants

An innovation of the 1954 Housing Act was the attempt to stimulate good planning in metropolitan areas, regional areas, and communities of less than 25,000 population through a system of matching Federal grants to State, regional, and metropolitan planning agencies. Interest in the program is growing rapidly among smaller municipalities which realize the need for constructive city planning but lack the resources to secure it without outside help. Under terms of the Housing Act, communities of under 25,000 population may apply to their State planning agencies for assistance. The Federal Government will then match the funds that the State puts into the program. The State agencies may provide the desired assistance through their own technical staffs or by retaining competent private firms to do their work.

As of June 30, 1956, grants totaling more than \$370,000 had been approved to aid planning in 157 small communities in 12 States. Such planning commonly embraces land-use studies, street and highway plans, development of zoning ordinances and subdivision regulations, and other work contributing to a general community plan. In some cases, the proposed planning will contribute to the community's workable program for urban renewal. Grants totaling almost \$123,000 had been approved for 5 separate regional planning areas, and another \$267,705 for planning in 9 metropolitan areas.

A highlight of 1955 was the rapid approval of planning assistance grants for flood-stricken Connecticut. One grant helped the Connecticut Development Commission extend planning assistance

<sup>8</sup> For a summary of relevant sections of this act, see *Construction*, Department of Labor, August 1954 (p. 28). For amendments in the Housing Act of 1955, see *Construction Review*, August 1955 (pp. 49-50); and in the Housing Act of 1956, see *Construction Review*, September 1956 (pp. 47-50).

to 14 of the State's hardest hit small communities. Other grants are helping the State develop broad urban development and redevelopment plans for the Naugatuck, Farmington, and Quinebaug River Valleys. In the 9 months following the northeastern floods, the Urban Renewal Administration approved planning advances for urban renewal projects in flood-damaged areas of 10 cities. A new provision in the Housing Act of 1956 will assist in the rehabilitation and rebuilding of disaster areas more quickly by providing authority to extend urban renewal assistance in such areas without regard to a number of requirements which are applicable in normal situations.

#### Demonstration Project Grants

Another new Federal aid authorized by the 1954 Housing Act is the demonstration grant, which may amount to as much as two-thirds of the estimated cost of a demonstration or pilot project aimed at improving methods and techniques of urban renewal operations. As of June 30, 1956, grants totaling \$631,787 had been approved for 12 demonstration projects. The grants cover a variety of investigations, including the development of acceptable standards for measuring obsolescence and inadequacy of commercial and industrial structures; a study of the problems involved in stimulating and assisting citizens to undertake voluntary rehabilitation of their environment and homes; the documentation of a small city's experience in implementing the seven elements of its workable program; and the development of criteria for selecting blighted residential structures which are suitable for rehabilitation. The experience of cities in carrying out demonstration programs will be carefully documented and the final reports will be widely disseminated.

#### STATE ENABLING LEGISLATION

The fact that less than three-fourths of the States presently have communities with active urban renewal projects is worth special comment. It is important to remember that for a community to be eligible for Federal loan and grant assistance, the State legislature must have invested a local public agency with specific corporate powers to accept the Federal aid and carry out the project. Not all States have vested such powers in their cities when the Federal program started in 1949. In fact, a dozen States still have no slum clearance and urban redevelopment laws. Others have vested the power in only a single city. Even in States with enabling legislation, progress has often been slow because of the need to interpret and test the legislation.

It is encouraging that within the past year three new States have come into the program. Kansas and North Dakota passed legislation at the last meeting of their legislatures, and Kansas City and Fargo lost little time in applying for planning advances for projects. Georgia, whose earlier redevelopment law was invalidated in 1953 by the State Supreme Court, passed a new law in 1955, and within a few months, eight Georgia cities had applied for and received planning advances.

Workable programs have been approved for several cities in States which have no adequate redevelopment legislation—including Texas, Utah, and New Mexico. Although these cities are prohibited from acquiring private property for resale to private enterprise, they propose for the present to undertake urban renewal through rehabilitation, code enforcement, and spot clearance for public redevelopment. In the meantime, the cities are seeking State legislation that will permit them to acquire and clean blighted areas for private redevelopment.



#### NEW HOUSING CHARACTERISTICS IN 1955 AND EARLIER YEARS

New Housing Characteristics in 1955 and Earlier Years, an article in the Monthly Labor Review of July 1956, analyzes the changing features of new housing over the past two decades in terms of measures introduced to cope with the sequence of economic depression, war, and postwar readjustment. The reprint of this article contains added regional and other tabulations obtained in the Bureau of Labor Statistics surveys of new housing, highlights of which appeared in the February 1956 issue of Construction Review (Characteristics of New Housing, 1954-55).

Copies of this reprint (No. 2196)—New Housing Characteristics in 1955 and Earlier Years—may be obtained without charge from the U. S. Department of Labor, Bureau of Labor Statistics, Washington 25, D. C.

# Estimating Demand for Warm Air Furnaces

NATHAN H. SCHEIN\*

The analysis presented here by the Building Materials and Construction Division of the Business and Defense Services Administration is one of a series of studies relating to the demand for a number of important building and construction materials.<sup>1</sup> Although this study pertains to the warm air furnace<sup>2</sup> industry, the standard statistical methods used herein have also been valuable in studying the demand patterns for other products.

The results of this analysis should not be interpreted as a forecast by the Business and Defense Services Administration of the demand for warm air furnaces. Normally, the demand for furnaces is created by two factors: original installations in newly built homes and replacements for wornout units. There are many factors, such as technological innovations and business cycles which could influence the demand for warm air furnaces and its competitive products, in both upward and downward directions, and which do not readily lend themselves to the type of statistical treatment employed here. For example, design improvements or other developments which increase the utility of the heating unit, such as the combination heating and air-conditioning system, may further stimulate demand beyond the normal growth rate. Such changes frequently introduce elements absent in the period covered by the correlation analysis. To prevent too rapid obsolescence, the equation should be revised from year to year as more data become available. The longer the period covered, the greater, in general, is the reliability which may be placed in the results.

TABLE 1.—WARM AIR FURNACE SHIPMENTS AND NEW 1-FAMILY HOUSES STARTED, 1948-56

(In thousands)

Year	Number of warm air furnaces			Number of 1-family houses started in nonfarm areas
	Shipments		Estimated maximum replacement demand <sup>1</sup>	
	Actual	Calculated		
1948.....	777	714	188	767
1949.....	720	743	192	794
1950.....	1, 100	1, 100	209	1, 154
1951.....	872	895	281	900
1952.....	928	961	327	943
1953.....	997	995	394	938
1954.....	1, 132	1, 156	440	1, 078
1955.....	1, 348	1, 309	513	1, 194
1956.....	--	1, 188	460	<sup>2</sup> 1, 100

Source: Actual shipments of warm air furnaces from Department of Commerce; housing starts from Department of Labor. <sup>1</sup> See table 2. <sup>2</sup> Estimated.

## Trend in Recent Years

Shipments of warm air furnaces, both forced air and gravity type--but especially the former--have increased since the end of World War II to approximately 1,350,000 in 1955, or 2½ times the 1940-41 rate.

During World War II, the severe limitations placed on the production and distribution of civilian-type goods by the War Production Board resulted in very low levels of production and shipments of

\* Of the Building Materials and Construction Division, Business and Defense Services Administration, Department of Commerce.

<sup>1</sup> See The Demand for Cement (in Construction and Building Materials, July 1954, Department of Commerce) and Estimating Demand for Fabricated Structural Steel (in Construction Review, December 1955).

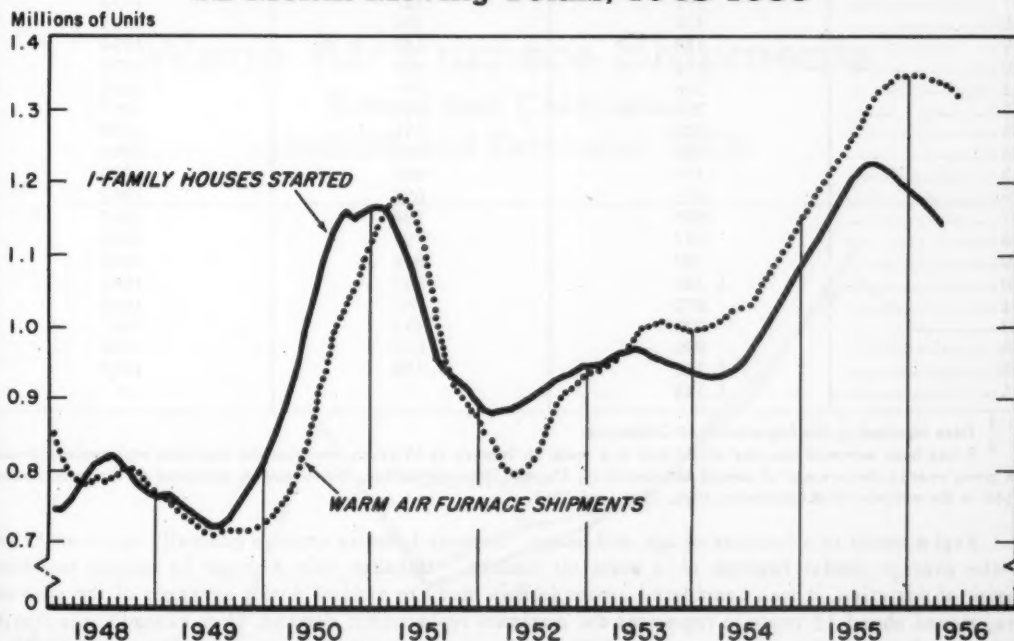
<sup>2</sup> As used in this article, warm air furnaces include both forced air and gravity types, excluding floor and wall furnaces.

warm air furnaces. From a total of 568,000 units in 1941, the output fell in 1942 and 1943 to 281,000 and 198,000, respectively--quantities hardly equal to the tasks of meeting new installation and replacement needs. Consequently, in 1944 and 1945, production restrictions were relaxed somewhat to permit the output of 281,000 and 373,000 warm air furnace units in these 2 years.

With the end of hostilities, the domestic heating industry, in spite of material supply problems carrying over from the war years, further increased production to take care of the postwar upsurge in residential building, the deferred replacement needs, and refilling the distribution pipeline. By the end of the first half of 1948, the backlog and pipeline needs had apparently been satisfied. From that point up to the present time, the trends of furnace shipments and 1-family nonfarm housing starts have been very similar. (See chart 1.) Throughout the period from 1948-50, shipments appear to lag behind starts by about 4 to 5 months.

Chart 1

## One-Family Houses Started and Warm Air Furnace Shipments 12-Month Moving Totals, 1948-1956



The particularly close correspondence between starts and shipments from 1948-52 is probably accounted for by the fact that during this period replacement requirements were mirroring the low production rates in the depression years of the 1930's. Another low level of replacement demand (not as low as the postwar years) may be expected in 1957-59, reflecting the low production rates imposed during World War II.

During the 1957-59 period, as in the years following the end of World War II, demand will be generated chiefly by new construction needs. However, beginning about 1961 and continuing for more than a decade, with increasing vigor from year to year, replacement needs will rise (table 2), reflecting the very high shipment rates which began in 1946.



### Methodology

Several proposals have been advanced for measuring replacement demand. It has been suggested, for example, that replacements are a function of the total number of furnaces in use. Acceptance of this approach would virtually eliminate the possibility of being able to study these needs critically, since it is extremely difficult if not impossible to arrive at an estimate of the number of furnaces in use. Second, even if such an estimate were possible, logic does not support the thesis that any constant portion of the total number in use require replacement.

TABLE 2.—COMPUTATION OF MAXIMUM REPLACEMENT DEMAND FOR WARM AIR FURNACES

Year shipped	Warm air furnace shipments (thousands of units)		Effective year of maximum replacement demand <sup>2</sup>
	Annual total <sup>1</sup>	3-year centered moving average	
1931.....	207	--	--
1932.....	200	199	1947
1933.....	190	188	1948
1934.....	175	192	1949
1935.....	211	209	1950
1936.....	240	281	1951
1937.....	392	327	1952
1938.....	350	394	1953
1939.....	439	440	1954
1940.....	531	513	1955
1941.....	568	460	1956
1942.....	281	349	1957
1943.....	198	253	1958
1944.....	281	284	1959
1945.....	373	449	1960
1946.....	693	650	1961
1947.....	885	784	1962
1948.....	777	794	1963
1949.....	720	866	1964
1950.....	1,100	897	1965
1951.....	872	967	1966
1952.....	928	932	1967
1953.....	996	1,019	1968
1954.....	1,132	1,159	1969
1955.....	1,348	--	--

<sup>1</sup> Data reported by the Department of Commerce.

<sup>2</sup> It has been assumed that the useful life of a warm air furnace is 15 years, and that the maximum replacement demand for a given year is the average of annual shipments 14, 15, and 16 years earlier. For example, maximum replacement demand in 1956 is the average of shipments in 1940, 1941, and 1942.

Replacement is a function of age and usage. Heating industry experts generally agree on 15 years as the average useful lifetime of a warm air furnace. Because this average is subject to a certain amount of variation, it was considered proper in this study to employ 3-year averages of the statistical data, moved ahead 15 years to represent the maximum replacement demand. For example, the maximum number of furnaces for replacement in 1950 is the average of furnaces produced in 1934, 1935, and 1936. Because of demolitions of dwelling units or conversion to other use and other factors, the maximum potential is subject to diminution. Only a part of the maximum will be reflected in the actual demand and be included in actual shipments.

By using the 2 factors of 1-family houses started and estimated maximum replacement, it is possible to derive estimated shipments which come close to manufacturers' actual shipments. A line has been fitted to furnace shipments using 1-family residential starts and maximum replacements as the independent variables. Manufacturers' shipments are used as most closely approximating current demand, especially when no pipeline filling problem is present.

The mathematical equation involved expresses warm air furnace shipments in a given year as a function of 1-family, nonfarm residential starts in that year and the 3-year centered average number of



furnaces shipped 15 years previously. The derived equation was based on data for the 8 years, 1948-55. This and other basic information are shown in tables 1 and 2. Trends and results of the analysis are shown graphically in charts 1 and 2. Based on these data, the following equation was derived:

$$X_{1c} = -131.48 + .965X_2 + .56119X_3$$

where  $X_{1c}$  = Calculated warm air furnace shipments  
(in thousands of furnaces)

$X_2$  = 1-family houses started in nonfarm areas  
(in thousands of dwelling units)

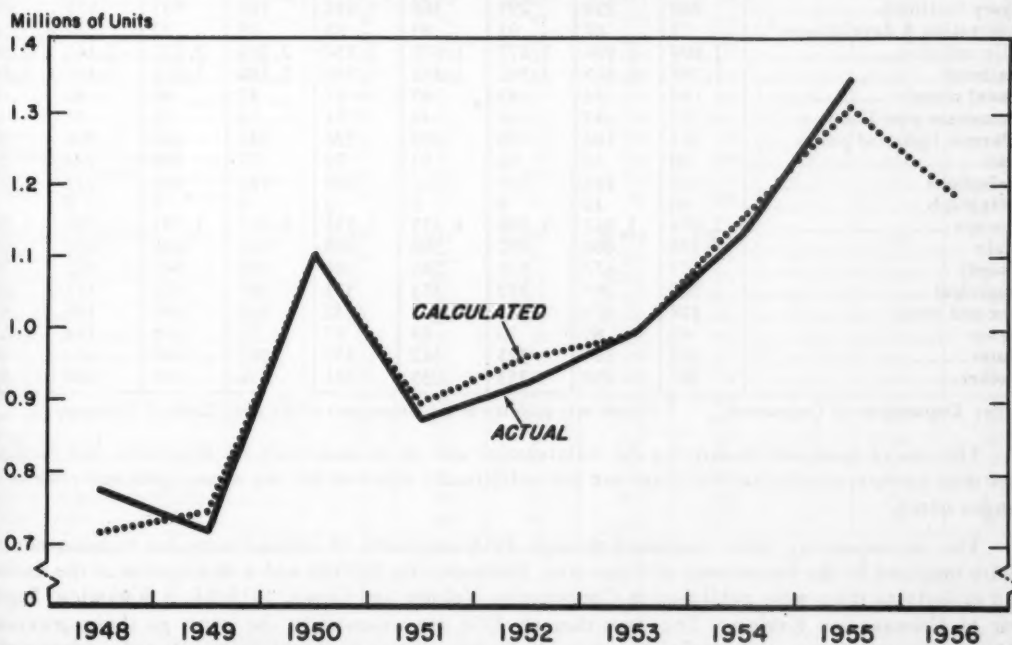
$X_3$  = 3-year centered moving average of furnace shipments  
15 years earlier (in thousands of furnaces)

The standard error of estimate (5 degrees of freedom) is  $\pm 40.5$  thousand furnaces, or 4.1 percent of the average annual shipments during the 8-year period. Broadly speaking, this means that in 2 out of 3 cases, the differences between calculated shipments (based on this equation) and actual shipments are not likely to differ by more than 4.1 percent.

Chart 2

## Warm Air Furnace Shipments

### Actual and Calculated 1948-55 and Estimated 1956



SOURCE: U. S. DEPARTMENT OF COMMERCE.

Because of the high correlation between shipments and starts and shipments and replacements and the relatively short period of time covered by the analysis, the equation should not be used to estimate separately the demand from either new housing or replacement. The equation is suitable for arriving at a reasonably accurate appraisal of total demand only.

## Expenditures for Maintenance and Repairs in 1955<sup>1</sup>

Reflecting the high level of economic activity during 1955, maintenance and repair expenditures for all types of construction reached a record peak of \$15.9 billion in that year. More than half of the \$1.3-billion increase over the 1954 level was found in the nonfarm residential area. With only three minor exceptions, all categories of construction experienced higher outlays in 1955 than in 1954.

The basic data for nonfarm residential expenditures for maintenance and repairs suggest several noteworthy developments, although the source materials are not adequate for any precise quantitative appraisals. Not only were more homeowners participating in fix-up operations in 1955 than in 1954, but their average expenditure also rose. For rental dwellings, various surveys imply that the number of such occupied units declined and tenants reduced their outlays. It is also indicated that stepped-up expenditures by landlords partly compensated for the effect of tenants' retrenchments. The actual increase in disbursements by owner-occupants exceeded the \$800-million rise for all nonfarm residential building, but was offset by the decline in expenditures on rental properties.

### MAINTENANCE AND REPAIR EXPENDITURES, 1947-55

(Millions of dollars)

Type of construction	1947	1948	1949	1950	1951	1952	1953	1954	1955
<b>Total maintenance and repairs</b>	<b>10,341</b>	<b>11,762</b>	<b>11,922</b>	<b>12,034</b>	<b>13,332</b>	<b>14,093</b>	<b>14,306</b>	<b>14,594</b>	<b>15,863</b>
Residential buildings (nonfarm)	4,200	4,800	4,800	4,600	5,000	5,300	5,300	5,700	6,500
Nonresidential buildings	1,955	2,250	2,285	2,360	2,540	2,672	2,799	2,868	3,010
Farm buildings	574	618	581	639	722	744	677	609	619
Operators' dwellings	184	200	188	208	234	241	219	197	199
Service buildings	390	418	393	431	488	503	458	412	420
Military facilities	240	258	295	369	614	702	637	579	628
Conservation & development <sup>1</sup>	73	87	91	83	88	99	87	82	81
Public utilities	1,699	1,904	1,877	1,900	2,134	2,203	2,327	2,146	2,243
Railroad	1,265	1,405	1,343	1,342	1,543	1,584	1,652	1,410	1,447
Local transit	46	44	43	45	45	47	46	45	45
Petroleum pipe lines	37	42	44	44	51	53	55	57	63
Electric light and power	161	184	198	209	226	232	267	288	316
Gas	60	76	84	91	92	97	106	124	138
Telephone	120	143	156	160	168	181	192	213	226
Telegraph	10	10	9	9	9	9	9	9	8
Highways	1,074	1,242	1,359	1,423	1,531	1,611	1,701	1,780	1,856
State	378	468	492	506	568	616	626	662	694
County	427	477	515	564	588	604	643	665	703
Municipal	269	297	352	353	375	391	432	453	459
Sewer and water	324	373	401	425	442	486	499	546	615
Sewer	62	69	76	83	87	93	95	114	136
Water	262	304	325	342	355	393	404	432	479
All other	202	230	233	235	261	276	279	284	311

Source: Department of Commerce.

<sup>1</sup> Covers only projects of the Department of the Army Corps of Engineers.

The source materials underlying the maintenance and repair statistics for structures and facilities other than nonfarm residential buildings are not sufficiently detailed for any meaningful analyses of the changes noted.

The accompanying table continues through 1955 estimates of expenditures for maintenance and repairs prepared by the Department of Commerce. Estimates for 1915-54 and a description of the methods used in deriving them were published in *Construction Volume and Costs, 1915-54, A Statistical Supplement to Construction Review*. The data through 1954 are essentially the same as those previously published except that a major revision was made in the series for gas utilities. For the other series, revisions were limited to 1954 figures which were necessarily preliminary at the time of their release.

<sup>1</sup> Prepared in the Building Materials and Construction Division, Business and Defense Services Administration, U. S. Department of Commerce.

# STATISTICAL SERIES

15

NOTE: ALL THE STATISTICAL SERIES IN CONSTRUCTION REVIEW  
ARE SUBJECT TO REVISION FOR THE LATEST PERIOD SHOWN.

## Part I--Construction Put in Place

Table 1.--New Construction Put in Place: Current Month, by Type of Construction

Type of construction	Value (in millions of dollars)					Percent change		
	1956		1955	First 9 months		Sept. 1956 from--		First 9 months, 1955-56
	Sept.	Aug.	Sept.	1956	1955	Aug. 1956	Sept. 1955	
<b>TOTAL NEW CONSTRUCTION</b> .....	4,267	4,279	4,148	32,691	31,994	(1)	+ 3	+ 2
<b>PRIVATE CONSTRUCTION</b> .....	2,840	2,862	2,879	22,758	22,664	- 1	- 1	(1)
Residential building (nonfarm).....	1,416	1,422	1,561	11,306	12,388	(1)	- 9	- 9
New dwelling units.....	1,235	1,240	1,410	9,950	11,190	(1)	-12	-11
Additions and alterations.....	140	140	119	1,030	955	0	+18	+ 8
Nonhousekeeping.....	41	42	32	326	243	- 2	+28	+34
Nonresidential building.....	784	786	714	6,436	5,497	(1)	+10	+17
Industrial.....	273	273	213	2,236	1,733	0	+28	+29
Commercial.....	289	294	303	2,454	2,170	- 2	- 5	+13
Office buildings and warehouses.....	126	123	102	973	809	+ 2	+24	+20
Stores, restaurants, and garages.....	163	171	201	1,481	1,361	- 5	-19	+ 9
Other nonresidential building.....	222	219	198	1,746	1,594	+ 1	+12	+10
Religious.....	72	70	69	545	538	+ 3	+ 4	+ 1
Educational.....	49	49	45	394	358	0	+ 9	+10
Hospital and institutional.....	30	28	31	233	265	+ 7	- 3	-12
Social and recreational.....	27	27	22	196	177	0	+23	+11
Miscellaneous.....	44	45	31	378	256	- 2	+42	+48
Farm construction.....	148	161	159	1,185	1,259	- 8	- 7	- 6
Public utility.....	480	481	433	3,744	3,391	(1)	+11	+10
Railroad.....	40	39	36	319	270	+ 3	+11	+18
Telephone and telegraph.....	85	90	76	720	584	- 6	+12	+23
Other public utility.....	355	352	321	2,705	2,537	+ 1	+11	+ 7
All other private.....	12	12	12	87	129	0	0	-33
<b>PUBLIC CONSTRUCTION</b> .....	1,427	1,417	1,269	9,933	9,330	+ 1	+12	+ 6
Residential building.....	24	23	22	189	199	+ 4	+ 9	- 5
Nonresidential building.....	383	390	374	3,046	3,270	- 2	+ 2	- 7
Industrial.....	43	42	45	325	613	+ 2	- 4	-47
Educational.....	229	235	221	1,909	1,844	- 3	+ 4	+ 4
Hospital and institutional.....	32	32	32	234	258	0	0	- 9
Other nonresidential building.....	79	81	76	578	555	- 2	+ 4	+ 4
Military facilities.....	148	143	136	1,008	948	+ 3	+ 9	+ 6
Highway.....	615	600	533	3,780	3,328	+ 3	+15	+14
Sewer and water.....	123	127	100	950	819	- 3	+23	+16
Sewer.....	66	70	56	522	464	- 6	+18	+13
Water.....	57	57	44	428	355	0	+29	+21
Public service enterprise.....	50	51	35	351	201	- 2	+43	+75
Conservation and development.....	65	65	53	477	448	0	+23	+ 6
All other public.....	19	18	16	132	117	+ 6	+19	+13

Source: Departments of Commerce and Labor.

<sup>1</sup> Change of less than one-half of 1 percent.

NOTE: These monthly estimates do not reflect the effects of shortages  
of steel and other materials on the volume of work put in place.

## CONSTRUCTION REVIEW

Table 2.—New Construction Put in Place: Recent Monthly Trend, by Type of Construction

(Value, in millions of dollars)													
Type of construction	1955				1956								
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
<b>TOTAL NEW CONSTRUCTION..</b>	<b>4,148</b>	<b>4,037</b>	<b>3,702</b>	<b>3,258</b>	<b>2,938</b>	<b>2,811</b>	<b>3,072</b>	<b>3,389</b>	<b>3,714</b>	<b>4,008</b>	<b>4,213</b>	<b>4,279</b>	<b>4,267</b>
<b>PRIVATE CONSTRUCTION .....</b>	<b>2,879</b>	<b>2,810</b>	<b>2,663</b>	<b>2,435</b>	<b>2,176</b>	<b>2,087</b>	<b>2,261</b>	<b>2,403</b>	<b>2,550</b>	<b>2,730</b>	<b>2,849</b>	<b>2,862</b>	<b>2,840</b>
Residential building													
(nonfarm).....	1,561	1,509	1,419	1,279	1,080	998	1,116	1,212	1,270	1,362	1,430	1,422	1,416
New dwelling units .....	1,410	1,360	1,280	1,160	980	895	1,000	1,070	1,105	1,180	1,245	1,240	1,235
Additions and alterations.....	119	116	107	88	70	73	86	109	128	142	142	140	140
Nonhousekeeping .....	32	33	32	31	30	30	30	33	37	40	43	42	41
Nonresidential building .....	714	721	715	679	650	647	656	664	704	759	786	786	784
Industrial .....	213	219	224	223	223	224	226	237	251	261	268	273	273
Commercial .....	303	306	297	270	251	252	258	253	266	290	301	294	289
Office buildings													
and warehouses .....	102	106	112	109	105	101	97	98	102	106	115	123	126
Stores, restaurants,													
and garages .....	201	200	185	161	146	151	161	155	164	184	186	171	163
Other nonresidential bldg. ..	198	196	194	186	176	171	172	174	187	208	217	219	222
Religious .....	69	68	66	62	58	55	53	53	56	62	66	70	72
Educational .....	45	45	45	44	41	40	39	40	42	46	48	49	49
Hospital & institutional ..	31	30	29	27	26	25	25	24	24	25	26	28	30
Social and recreational ..	22	21	21	20	18	17	18	19	21	23	26	27	27
Miscellaneous .....	31	32	33	33	33	34	37	38	44	52	51	45	44
Farm construction .....	159	132	111	98	97	101	109	121	139	150	159	161	148
Public utility .....	433	437	407	369	341	334	373	398	427	448	462	481	480
Railroad .....	36	39	35	30	30	29	33	35	36	38	39	39	40
Telephone and telegraph ...	76	75	74	72	70	70	75	80	80	85	85	90	85
Other public utility .....	321	323	298	267	241	235	265	283	311	325	338	352	355
All other private .....	12	11	11	10	8	7	7	8	10	11	12	12	12
<b>PUBLIC CONSTRUCTION.....</b>	<b>1,269</b>	<b>1,227</b>	<b>1,039</b>	<b>823</b>	<b>762</b>	<b>724</b>	<b>811</b>	<b>986</b>	<b>1,164</b>	<b>1,278</b>	<b>1,364</b>	<b>1,417</b>	<b>1,427</b>
Residential building .....	22	22	21	21	20	20	18	19	19	23	23	23	24
Nonresidential building .....	374	350	321	286	292	285	303	318	337	357	381	390	383
Industrial .....	45	40	38	30	35	34	33	31	32	37	38	42	43
Educational .....	221	212	200	186	190	187	195	206	216	220	231	235	229
Hospital and institutional ..	32	28	25	20	20	19	23	24	27	27	30	32	32
Other nonresidential bldg. ..	76	70	58	50	47	45	52	57	62	73	82	81	79
Military facilities .....	136	136	116	97	84	78	84	98	113	127	133	143	148
Highway .....	533	524	405	263	210	195	230	350	470	535	575	600	615
Sewer and water .....	100	97	89	80	82	77	92	102	109	115	123	127	123
Sewer .....	56	54	51	46	46	42	50	57	60	63	68	70	66
Water .....	44	43	38	34	36	35	42	45	49	52	55	57	57
Public service enterprises .....	35	31	25	22	25	23	30	38	42	44	48	51	50
Conservation and													
development .....	53	52	49	44	39	36	42	47	58	61	64	65	65
All other public .....	16	15	13	10	10	10	12	14	16	16	17	18	19

Source: Departments of Commerce and Labor.

## COMPOSITION OF REGIONS AND GEOGRAPHIC DIVISIONS

NORTHEAST		NORTH CENTRAL		SOUTH		WEST	
1. New England	3. E. N. Central	4. W. N. Central		5. S. Atlantic	6. E. S. Central	8. Mountain	
Connecticut	Illinois	Iowa		Alabama	Alabama	Arizona	
Maine	Indiana	Kansas		Dist. of Col.	Kentucky	Colorado	
Massachusetts	Michigan	Minnesota		Florida	Mississippi	Idaho	
New Hampshire	Ohio	Missouri		Georgia	Tennessee	Montana	
Rhode Island	Wisconsin	Nebraska		Maryland		Nevada	
Vermont		North Dakota		N. Carolina	7. W. S. Central	New Mexico	
		South Dakota		S. Carolina	Arkansas	Utah	
2. Middle Atlantic				Virginia	Louisiana	Wyoming	
New Jersey				W. Virginia	Oklahoma		
New York					Texas	9. Pacific	
Pennsylvania						California	
						Oregon	
						Washington	

## NONFARM POPULATION DISTRIBUTION IN 1950

NORTHEAST—29.5 percent.

NORTH CENTRAL—29.0 percent.

SOUTH—27.7 percent.

WEST—13.8 percent.



Chart I.

## New Construction Put in Place

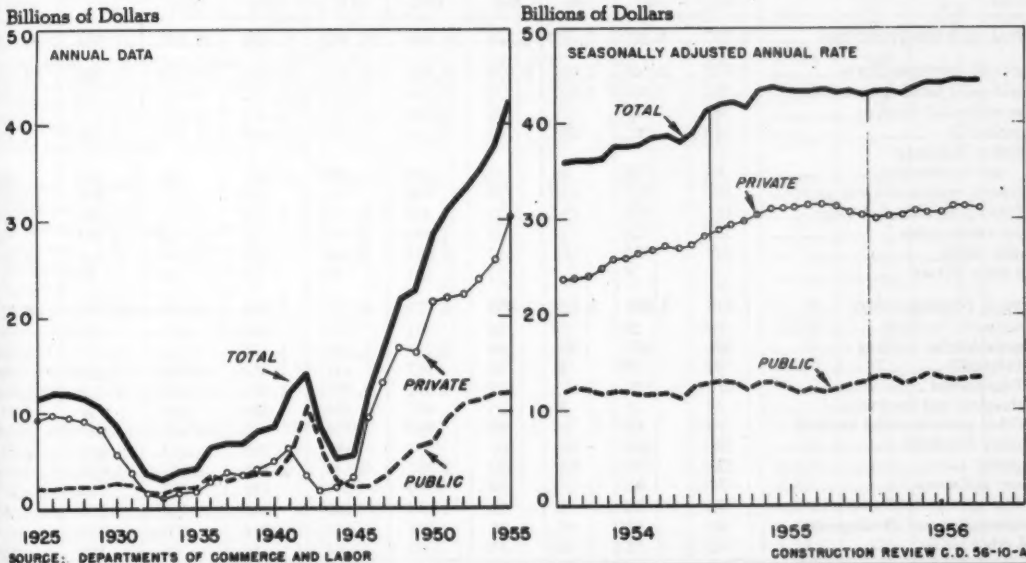


Table 3.--New Construction Put in Place: Seasonally Adjusted Annual Rate, by Type of Construction

(Value, in millions of dollars)

Type of construction	Seasonally adjusted annual rate							Annual total	
	1955	1956						1954	1955
	Sept.	Apr.	May	June	July	Aug.	Sept.	1954	1955
<b>TOTAL NEW CONSTRUCTION</b> .....	43,476	43,896	44,232	44,136	44,496	44,484	44,484	37,782	42,991
<b>PRIVATE CONSTRUCTION</b> .....	31,548	30,756	30,708	30,660	31,260	31,176	31,116	25,853	30,572
Residential building (nonfarm) .....	17,064	15,912	15,084	15,000	15,456	15,372	15,444	13,496	16,595
Nonresidential building .....	8,148	8,796	8,928	8,976	9,096	9,072	8,952	6,250	7,612
Industrial .....	2,508	2,904	3,132	3,264	3,312	3,312	3,216	2,030	2,399
Commercial .....	3,480	3,516	3,360	3,288	3,300	3,348	3,312	2,192	3,043
Office buildings and warehouses .....	1,188	1,296	1,332	1,356	1,392	1,428	1,464	958	1,136
Stores, restaurants, and garages .....	2,292	2,220	2,028	1,932	1,908	1,920	1,848	1,254	1,907
Other nonresidential building .....	2,160	2,376	2,436	2,424	2,484	2,412	2,424	2,008	2,170
Farm construction .....	1,584	1,524	1,512	1,500	1,500	1,488	1,476	1,645	1,600
Public utility .....	4,608	5,028	5,076	5,076	5,088	5,112	5,100	4,341	4,604
All other private .....	144	96	108	108	120	132	144	121	161
<b>PUBLIC CONSTRUCTION</b> .....	11,928	13,140	13,524	13,476	13,236	13,308	13,368	11,929	12,419
Residential building .....	240	240	228	264	264	252	264	336	263
Nonresidential building .....	4,068	3,816	3,924	4,080	4,080	4,140	4,176	4,641	4,227
Military facilities .....	1,368	1,248	1,416	1,476	1,464	1,452	1,476	1,030	1,297
Highway .....	4,140	5,256	5,316	5,100	4,896	4,836	4,764	3,870	4,520
Sewer and water .....	1,068	1,272	1,272	1,272	1,236	1,296	1,320	982	1,085
Public service enterprises .....	360	504	468	420	432	468	504	218	279
Conservation and development .....	516	636	720	696	684	672	660	704	593
All other public .....	168	168	180	168	180	192	204	148	155

Source: Departments of Commerce and Labor.



## CONSTRUCTION REVIEW

Table 4.—New Construction Put in Place: Value in 1947-49 Prices, by Type of Construction

Type of construction	(Millions of dollars)									
	1956			1955	Year					
	Aug.	July	June	Aug.	1950	1951	1952	1953	1954	1955
<b>TOTAL NEW CONSTRUCTION .....</b>	<b>3,257</b>	<b>3,222</b>	<b>3,077</b>	<b>3,368</b>	<b>26,608</b>	<b>26,988</b>	<b>27,662</b>	<b>28,931</b>	<b>31,094</b>	<b>34,476</b>
<b>PRIVATE CONSTRUCTION .....</b>	<b>2,142</b>	<b>2,140</b>	<b>2,055</b>	<b>2,270</b>	<b>19,885</b>	<b>18,677</b>	<b>18,428</b>	<b>19,433</b>	<b>21,000</b>	<b>24,155</b>
Residential building (nonfarm) .....	1,090	1,097	1,047	1,271	11,634	9,457	9,311	9,840	11,214	13,378
Nonresidential building .....	587	588	571	536	3,566	4,494	4,211	4,655	5,073	5,995
Industrial .....	209	205	201	165	1,004	1,790	1,909	1,807	1,690	1,946
Office buildings and warehouses.....	92	86	80	78	396	500	461	640	789	898
Stores, restaurants, and garages.....	125	137	136	143	828	733	525	857	998	1,473
Other nonresidential bldgs.....	161	160	154	150	1,338	1,471	1,316	1,351	1,596	1,678
Farm construction.....	129	128	121	144	1,583	1,616	1,643	1,484	1,407	1,350
Public utility.....	328	319	309	309	3,001	3,056	3,194	3,362	3,216	3,319
All other private .....	8	8	7	10	101	54	69	92	90	113
<b>PUBLIC CONSTRUCTION .....</b>	<b>1,115</b>	<b>1,082</b>	<b>1,022</b>	<b>1,098</b>	<b>6,723</b>	<b>8,311</b>	<b>9,234</b>	<b>9,498</b>	<b>10,094</b>	<b>10,321</b>
Residential building.....	18	18	18	18	321	512	550	459	281	213
Nonresidential building .....	286	281	266	294	2,237	3,050	3,465	3,531	3,743	3,299
Industrial .....	32	29	29	41	212	821	1,384	1,434	1,253	588
Educational .....	172	170	163	171	1,061	1,337	1,375	1,397	1,696	1,888
Hospital and institutional .....	23	22	20	25	467	466	401	297	289	257
Other nonresidential building .....	59	60	54	57	497	426	305	403	505	566
Military facilities .....	111	104	100	107	171	788	1,195	1,105	872	1,067
Highway .....	527	511	479	532	2,367	2,349	2,489	2,851	3,689	4,249
Sewer and water.....	85	82	78	74	590	655	639	681	724	770
Public service enterprises.....	33	32	29	24	164	168	148	146	156	192
Conservation and development .....	43	43	41	38	786	721	694	639	520	421
All other public .....	12	11	11	11	87	68	54	86	109	110

Source: Departments of Commerce and Labor.

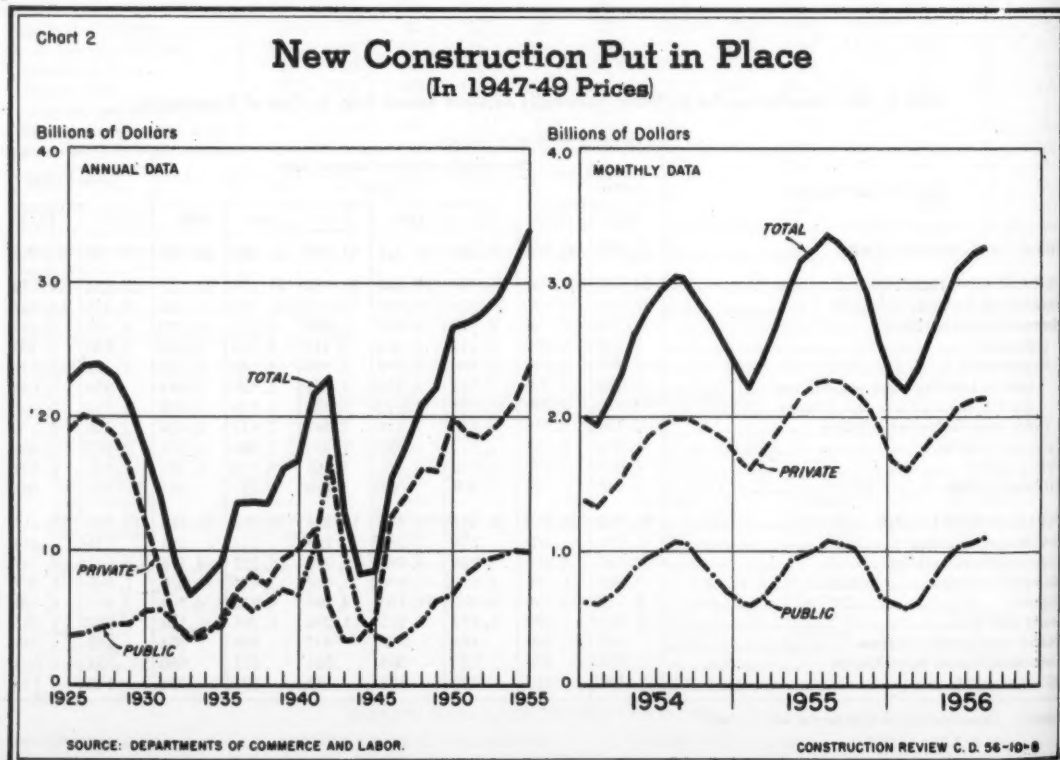


Table 5.--New Public Construction Put in Place, by Source of Funds, Ownership, and Type of Construction

Source of funds, ownership, and type of construction	Value (in millions of dollars)								Percent change		
	1955		1956				First 9 months		Sept. 1956 from		First 9 months, 1955-56
	Sept.	May	June	July	Aug.	Sept.	1955	1956	Sept. 1955	Aug. 1956	
<b>TOTAL PUBLIC CONSTRUCTION...</b>	<b>1,269</b>	<b>1,164</b>	<b>1,278</b>	<b>1,364</b>	<b>1,417</b>	<b>1,427</b>	<b>9,330</b>	<b>9,933</b>	<b>+12</b>	<b>+1</b>	<b>+6</b>
Federal funds .....	343	299	346	369	381	391	2,693	2,643	+14	+3	-2
Direct Federal .....	256	221	251	271	280	282	2,130	1,987	+10	+1	-7
Federal grants-in-aid <sup>1</sup> .....	87	78	95	98	101	109	563	656	+25	+8	+17
State and local funds .....	926	865	932	995	1,036	1,036	6,637	7,290	+12	0	+10
<b>FEDERALLY OWNED.....</b>	<b>256</b>	<b>221</b>	<b>251</b>	<b>271</b>	<b>280</b>	<b>282</b>	<b>2,130</b>	<b>1,987</b>	<b>+10</b>	<b>+1</b>	<b>-7</b>
Residential building .....	0	0	1	1	1	2	1	5	--	+100	(2)
Nonresidential building .....	56	41	52	62	59	56	668	425	0	-5	-36
Industrial .....	45	32	37	38	42	43	613	325	-4	+2	-47
Educational .....	1	1	0	1	1	0	4	4	-100	-100	0
Hospital .....	2	3	3	4	4	4	16	27	+100	0	+69
Other nonresidential .....	8	5	12	19	12	9	35	69	+13	-25	+97
Military facilities .....	136	113	127	133	143	148	948	1,008	+9	+3	+6
Highway .....	10	8	9	10	11	10	57	65	0	-9	+14
Conservation and development .....	53	58	61	64	65	65	448	477	+23	0	+6
All other federally owned .....	1	1	1	1	1	1	8	7	0	0	-13
<b>STATE AND LOCALLY OWNED.....</b>	<b>1,013</b>	<b>943</b>	<b>1,027</b>	<b>1,093</b>	<b>1,137</b>	<b>1,145</b>	<b>7,200</b>	<b>7,946</b>	<b>+13</b>	<b>+1</b>	<b>+10</b>
Residential building .....	22	19	22	22	22	22	198	184	0	0	-7
Nonresidential building .....	318	296	305	319	331	327	2,602	2,621	+3	-1	+1
Educational .....	220	215	220	230	234	229	1,840	1,905	+4	-2	+4
Hospital .....	30	24	24	26	28	28	242	207	-7	0	-14
Other nonresidential .....	68	57	61	63	69	70	520	509	+3	-1	-2
Highway .....	523	462	526	565	589	605	3,271	3,715	+16	+3	+14
Sewer and water .....	100	109	115	123	127	123	819	950	+23	-3	+16
Sewer .....	56	60	63	68	70	66	464	522	+18	-6	+13
Water .....	44	49	52	55	57	57	355	428	+29	0	+21
All other State and locally owned .....	50	57	59	64	68	68	310	476	+36	0	+54

Source: Departments of Commerce and Labor.

<sup>1</sup> Construction programs currently receiving Federal grants-in-aid cover highways, schools, hospitals, airports, and miscellaneous community facilities.<sup>2</sup> Percent increase exceeds 300.

#### CONSTRUCTION MACHINERY, EQUIPMENT DEALERS 1954 Census of Business, Wholesale Trade, Preliminary Report

This wholesale trade report gives basic business statistics concerning dealers in construction machinery and equipment, and is one of a series presenting preliminary results of the 1954 Census of Business. The report summarizes data for the United States as a whole, for geographic regions, and by State--giving the number of establishments; the amount of their sales, inventories, operating expenses, and payrolls; the number of employees; and the number of unincorporated businesses active as of November 15, 1954.

Copies of Construction Machinery, Equipment Dealers (Preliminary Trade Report, 1954 Census of Business, Wholesale Trade, Series PW-3-26) may be obtained, at 10 cents each, from the Bureau of the Census, U. S. Department of Commerce, Washington 25, D. C., or from any of the Commerce Department's field offices.

## Part II--New Housing

Table 6.--New Nonfarm Dwelling Units Started, by Ownership, Location, and Type of Structure

Period	Total	Ownership		Location <sup>1</sup>		Type of structure			
		Private	Public	Metro- politan	Nonmetro- politan	1-family houses	Units in 2-or-more family structures		
							All	2-4 family	5-or-more family
NUMBER OF NEW DWELLING UNITS (in thousands)									
Year: 1946.....	670.5	662.5	8.0	(2)	(2)	590.0	80.5	(3)	(3)
1947.....	849.0	845.6	3.4	(2)	(2)	740.2	108.8	(3)	(3)
1948.....	931.6	913.5	18.1	(2)	(2)	766.6	165.0	(3)	(3)
1949.....	1,025.1	988.8	36.3	(2)	(2)	794.3	230.8	(3)	(3)
1950.....	1,396.0	1,352.2	43.8	1,021.6	374.4	1,154.1	241.9	(3)	(3)
1951.....	1,091.3	1,020.1	71.2	776.8	314.5	900.1	191.2	(3)	(3)
1952.....	1,127.0	1,068.5	58.5	794.9	332.1	942.5	184.5	(3)	(3)
1953.....	1,103.8	1,068.3	35.5	803.5	300.3	937.8	166.0	(3)	(3)
1954.....	1,220.4	1,201.7	18.7	896.9	323.5	1,077.9	142.5	51.9	90.6
1955.....	1,328.9	1,309.5	19.4	975.8	353.1	1,194.4	134.5	49.2	85.3
First 8 months, 1955.....	942.8	929.2	13.6	696.5	246.3	846.3	96.5	34.4	62.1
First 8 months, 1956.....	782.9	767.2	15.7	552.8	230.1	(4)	(4)	(4)	(4)
1955: August.....	124.7	122.3	2.4	91.5	33.2	111.6	13.1	3.8	9.3
September.....	114.9	113.6	1.3	83.5	31.4	104.1	10.8	3.6	7.2
October.....	105.8	104.8	1.0	76.5	29.3	95.1	10.7	3.7	7.0
November.....	89.2	88.4	.8	64.6	24.6	80.4	8.8	4.3	4.5
December.....	76.2	73.5	2.7	54.7	21.5	68.5	7.7	3.2	4.5
1956: January.....	75.0	73.7	1.3	54.3	20.7	66.8	8.2	3.2	5.0
February.....	78.3	77.0	1.3	57.6	20.7	69.1	9.2	3.6	5.6
March.....	98.6	93.9	4.7	71.9	26.7	86.1	12.5	4.4	8.1
April.....	111.3	109.9	1.4	76.1	35.2	100.0	11.3	4.1	7.2
May.....	113.7	110.8	2.9	77.6	36.1	101.3	12.4	4.4	8.0
June.....	104.0	102.3	1.7	74.7	29.3	(4)	(4)	(4)	(4)
July.....	101.0	99.1	1.9	71.4	29.6	(4)	(4)	(4)	(4)
August.....	101.0	100.5	.5	69.2	31.8	(4)	(4)	(4)	(4)
Percent change									
First 8 months, 1955-56.....	-17.0	-17.4	+15.4	-20.6	-6.6	--	--	--	--
July-August, 1956.....	0	+40.8	-98.3	-3.1	+7.4	--	--	--	--
August, 1955-56.....	-19.0	-17.8	-79.2	-24.4	-4.2	--	--	--	--
PERCENT DISTRIBUTION									
Year: 1946.....	100	98.8	1.2	--	--	88.0	12.0	--	--
1947.....	100	99.6	.4	--	--	87.2	12.8	--	--
1948.....	100	98.1	1.9	--	--	82.3	17.7	--	--
1949.....	100	96.5	3.5	--	--	77.5	22.5	--	--
1950.....	100	96.9	3.1	73.2	26.8	82.7	17.3	--	--
1951.....	100	93.5	6.5	71.2	28.8	82.5	17.5	--	--
1952.....	100	94.8	5.2	70.5	29.5	83.6	16.4	--	--
1953.....	100	96.8	3.2	72.8	27.2	85.0	15.0	--	--
1954.....	100	98.5	1.5	73.5	26.5	88.3	11.7	4.3	7.4
1955.....	100	98.5	1.5	73.4	26.6	89.9	10.1	3.7	6.4
First 8 months, 1955.....	100	98.6	1.4	73.9	26.1	89.8	10.2	3.6	6.6
First 8 months, 1956.....	100	98.0	2.0	70.6	29.4	(4)	(4)	(4)	(4)
1955: August.....	100	98.1	1.9	73.4	26.6	89.5	10.5	3.0	7.5
September.....	100	98.9	1.1	72.7	27.3	90.6	9.4	3.1	6.3
October.....	100	99.1	.9	72.3	27.7	89.9	10.1	3.5	6.6
November.....	100	99.1	.9	72.4	27.6	90.1	9.9	4.8	5.1
December.....	100	96.5	3.5	71.8	28.2	89.9	10.1	4.2	5.9
1956: January.....	100	98.3	1.7	72.4	27.6	89.1	10.9	4.3	6.6
February.....	100	98.3	1.7	73.6	26.4	88.3	11.7	4.6	7.1
March.....	100	95.2	4.8	72.9	27.1	87.3	12.7	4.5	8.2
April.....	100	98.7	1.3	68.4	31.6	89.8	10.2	3.7	6.5
May.....	100	97.4	2.6	68.2	31.8	89.1	10.9	3.9	7.0
June.....	100	98.4	1.6	71.8	28.2	--	--	--	--
July.....	100	98.1	1.9	70.7	29.3	--	--	--	--
August.....	100	99.5	.5	68.5	31.5	--	--	--	--

Source: Department of Labor.

<sup>1</sup> Data by urban and rural-nonfarm classification for 1920-53 are available upon request. <sup>2</sup> Annual data not available before 1950; monthly data not available before January 1953. <sup>3</sup> Not available before January 1954. Tabulations showing the number of units in 2-family and 3-or-more family structures for 1920-53 are available upon request. <sup>4</sup> Not yet available.

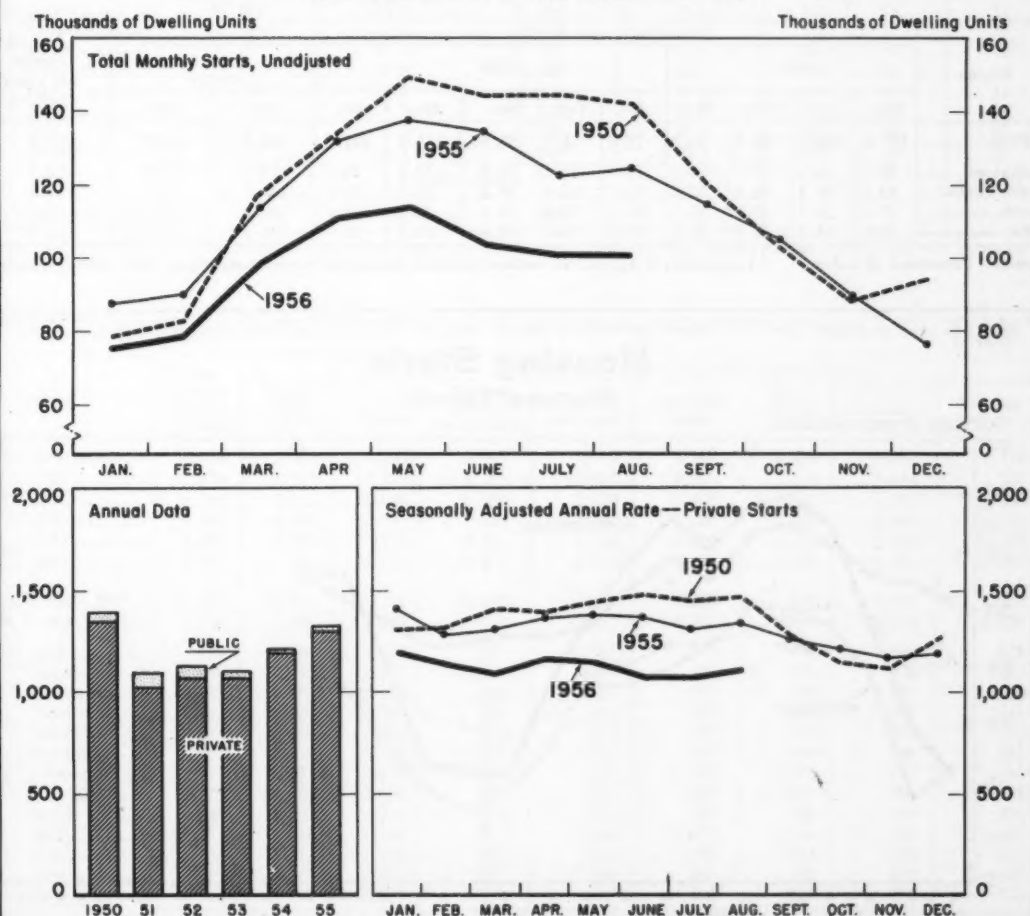
Table 7.—New Private Nonfarm Dwelling Units Started: Seasonally Adjusted Annual Rate

Year	Number of new dwelling units (in thousands)											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1946.....	682	709	756	719	698	662	642	638	601	607	612	647
1947.....	694	720	696	710	749	802	847	899	981	1,018	1,013	962
1948.....	938	829	955	1,019	997	990	969	898	862	806	802	807
1949.....	800	796	814	885	905	929	964	1,028	1,094	1,156	1,240	1,250
1950.....	1,306	1,310	1,406	1,390	1,448	1,476	1,460	1,478	1,282	1,149	1,120	1,269
1951.....	1,343	1,156	1,068	990	983	948	925	961	1,052	1,002	976	967
1952.....	1,000	1,086	1,060	1,037	1,039	1,029	1,084	1,075	1,099	1,121	1,100	1,092
1953.....	1,102	1,083	1,122	1,134	1,097	1,082	1,045	1,021	1,024	1,026	1,050	1,032
1954.....	1,056	1,081	1,086	1,121	1,111	1,175	1,221	1,244	1,260	1,275	1,377	1,458
1955.....	1,416	1,286	1,314	1,374	1,398	1,371	1,318	1,346	1,262	1,209	1,179	1,192
1956.....	1,195	1,127	1,094	1,157	1,146	1,070	1,070	1,110				

Source: Department of Labor.

Chart 3.

## Housing Starts (UNADJUSTED AND SEASONALLY ADJUSTED)



SOURCE: DEPARTMENT OF LABOR.

CONSTRUCTION REVIEW C.D.-56-10-C

## CONSTRUCTION REVIEW

Table 8.--New Private 1-Family Houses Started: Average Construction Cost

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
AVERAGE CONSTRUCTION COST													
1946.....	\$5,250	\$5,400	\$5,850	\$5,575	\$5,475	\$5,425	\$5,375	\$5,450	\$5,450	\$5,625	\$5,675	\$5,575	\$5,525
1947.....	5,700	5,825	6,150	6,275	6,250	6,450	6,725	6,950	7,025	7,275	7,525	7,650	6,750
1948.....	7,250	7,450	7,550	7,775	7,950	8,050	8,050	8,100	7,900	7,825	7,900	7,900	7,850
1949.....	7,650	7,525	7,450	7,500	7,650	7,675	7,525	7,650	7,725	7,675	7,675	7,625	7,625
1950.....	7,625	7,850	8,225	8,450	8,450	8,750	8,875	9,125	8,900	9,200	9,075	9,200	8,675
1951.....	9,100	9,250	9,175	9,325	9,475	9,475	9,400	9,300	9,450	9,225	9,250	9,125	9,300
1952.....	9,050	9,275	9,350	9,550	9,575	9,675	9,500	9,425	9,600	9,525	9,550	9,525	9,475
1953.....	9,400	9,600	9,800	10,000	9,900	10,000	10,125	10,175	10,200	10,175	9,975	10,000	9,950
1954.....	9,750	9,800	10,075	10,600	10,850	10,750	10,850	10,750	10,675	10,800	10,850	11,075	10,625
1955.....	10,575	11,125	11,250	11,250	11,400	11,400	11,475	11,425	11,525	11,575	11,575	11,625	11,350
1956.....	11,325	11,750	12,150	12,275	12,300	(1)	(1)	(1)					
Percent change, 1955 to 1956													
	+ 7.1	+5.6	+ 8.0	+ 9.1	+ 7.9	--	--	--					

Source: Department of Labor.

<sup>1</sup> Not yet available.Table 9.--New Nonfarm Dwelling Units Started, by Region <sup>1</sup>

Region	Number of new dwelling units (in thousands)										Percent change, 1st 5 mos. 1955-56	
	1955				1956				First 5 months			
	May	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	1955		1956
TOTAL .....	137.6	105.8	89.2	76.2	75.0	78.3	98.6	111.3	113.7	560.9	476.9	-15.0
Northeast .....	30.3	23.5	17.7	14.3	12.4	14.4	18.9	23.4	24.7	112.0	93.8	-16.3
North Central....	40.0	29.4	23.0	15.6	15.7	16.4	26.1	33.6	33.3	140.7	125.1	-11.1
South .....	37.4	28.5	27.8	27.7	27.3	26.8	29.2	31.0	32.8	169.0	147.1	-13.0
West .....	29.9	24.4	20.7	18.6	19.6	20.7	24.4	23.3	22.9	139.2	110.9	-20.3

Source: Department of Labor.

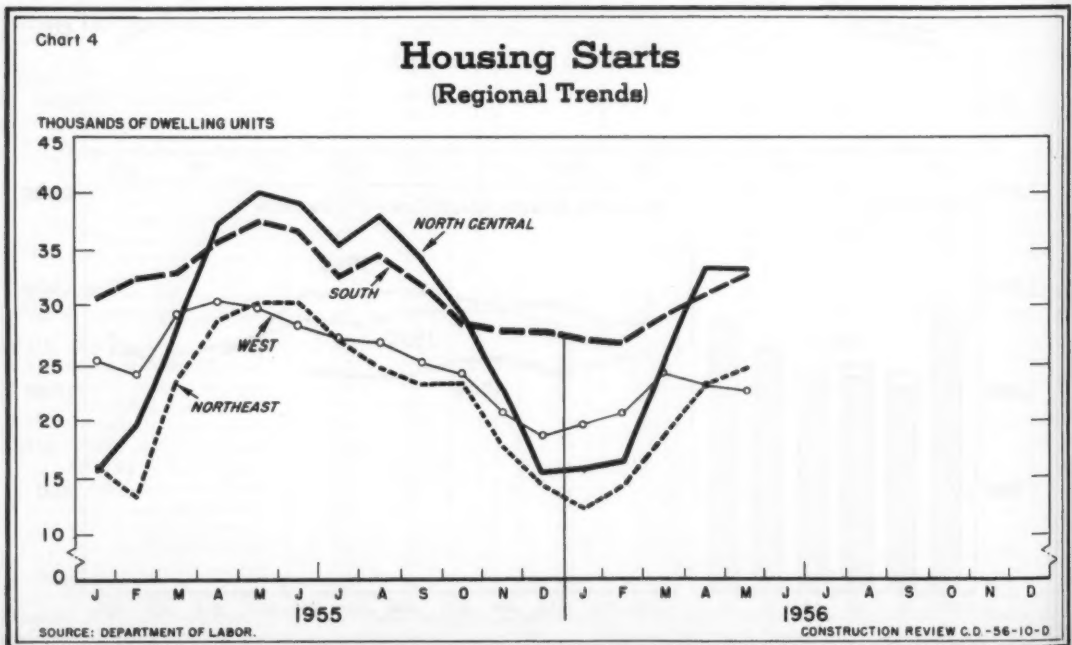
<sup>1</sup> Composition of regions, and nonfarm population distribution by region, are shown below table 2.



Table 10.--New Private Nonfarm Dwelling Units: Mortgages Applied for, Appraisals Requested, and Units Started Under FHA and VA Programs

Period	FHA-assisted units		VA-assisted units		Nonfarm dwelling units started		
	In applications	Started (in thousands)	In appraisal requests	Started (in thousands)	U. S. total	FHA- assisted	VA- assisted
	NUMBER OF DWELLING UNITS				PERCENT DISTRIBUTION		
Year: 1950.....	625,343	486.7	(1)	200.0	100	36	15
1951.....	267,127	263.5	164,365	148.6	100	26	15
1952.....	323,753	280.0	226,299	141.3	100	26	13
1953.....	327,323	252.0	251,437	156.6	100	24	15
1954.....	383,334	276.3	535,412	307.0	100	23	26
1955.....	314,888	277.1	620,776	391.8	100	21	30
First 8 mos., 1955.....	240,608	199.8	477,281	274.0	100	22	29
First 8 mos., 1956.....	167,665	137.5	300,865	189.9	100	18	25
1955: August.....	27,294	26.9	55,974	40.8	100	22	33
September.....	23,840	24.7	45,063	33.4	100	22	29
October.....	19,836	18.6	43,143	34.8	100	18	33
November.....	16,921	17.5	30,397	28.1	100	20	32
December.....	13,683	16.2	24,892	21.6	100	22	29
1956: January.....	16,181	13.0	29,284	23.0	100	18	31
February.....	20,189	13.1	37,134	17.4	100	17	23
March.....	26,376	17.0	37,511	20.6	100	18	22
April.....	23,755	19.9	45,769	26.4	100	18	24
May.....	24,278	19.7	44,395	26.6	100	18	24
June.....	18,331	18.5	35,620	26.4	100	18	26
July.....	19,484	17.6	34,634	25.2	100	18	25
August.....	19,070	18.7	36,518	24.4	100	19	24
	Percent change						
First 8 mos., 1955-56..	-30	-31	-37	-31			

Source: Table compiled by Department of Labor from data reported by the Federal Housing Administration (FHFA) and the Veterans Administration. <sup>1</sup>Not available.

Table 11.--Nonfarm Mortgage Recordings of \$20,000 or Less: Number and Average Amount, and Total Amount by Type of Lender

Period	Total number (in thousands)	Average amount (dollars)	Total amount (in millions of dollars) recorded by--					
			All lenders	Savings and loan associations	Insurance companies	Commercial banks	Mutual savings banks	Individuals
Year: 1950.....	3,032	5,335	16,179	5,060	1,618	3,365	1,064	2,299
1951.....	2,878	5,701	16,405	5,295	1,615	3,370	1,013	2,539
1952.....	3,028	5,950	18,018	6,452	1,420	3,600	1,137	2,758
1953.....	3,164	6,241	19,747	7,365	1,480	3,680	1,327	2,841
1954.....	3,458	6,644	22,974	8,312	1,768	4,239	1,501	2,882
1955.....	3,913	7,279	28,484	10,452	1,932	5,617	1,858	3,362
First 7 mos., 1955..	2,271	7,211	16,376	6,145	1,153	3,128	1,006	1,923
First 7 mos., 1956..	2,120	7,488	15,874	5,608	1,067	3,260	996	2,074
1955: July.....	335	7,348	2,463	953	161	472	168	283
August.....	366	7,362	2,697	1,060	163	521	179	310
September.....	342	7,377	2,522	946	155	505	168	292
October.....	326	7,320	2,387	835	153	505	167	285
November.....	314	7,380	2,316	765	152	499	171	285
December.....	293	7,457	2,188	700	156	457	166	268
1956: January.....	275	7,483	2,059	665	148	435	131	275
February.....	278	7,368	2,050	700	136	421	127	270
March.....	309	7,360	2,271	816	152	468	128	300
April.....	303	7,494	2,269	827	148	470	128	295
May.....	324	7,511	2,434	872	159	508	152	318
June.....	319	7,583	2,417	877	165	494	162	309
July.....	312	7,621	2,374	851	159	464	168	307
	Percent change <sup>a</sup>							
First 7 mos., 1955-56	-7	+4	-3	-9	-7	+4	-1	+8

Source: Table compiled by Department of Labor from data reported by the Federal Home Loan Bank Board.

## Part III--Building Permits

Table 12.--Building Permit Activity: Current Summary, by Type of Building Construction

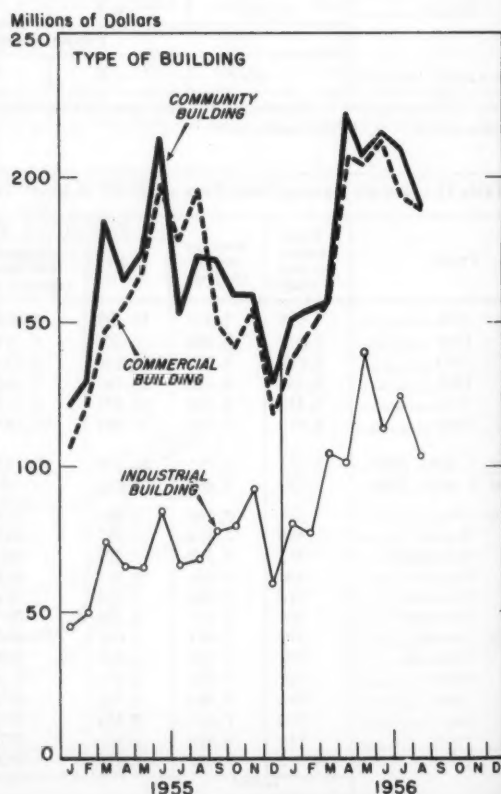
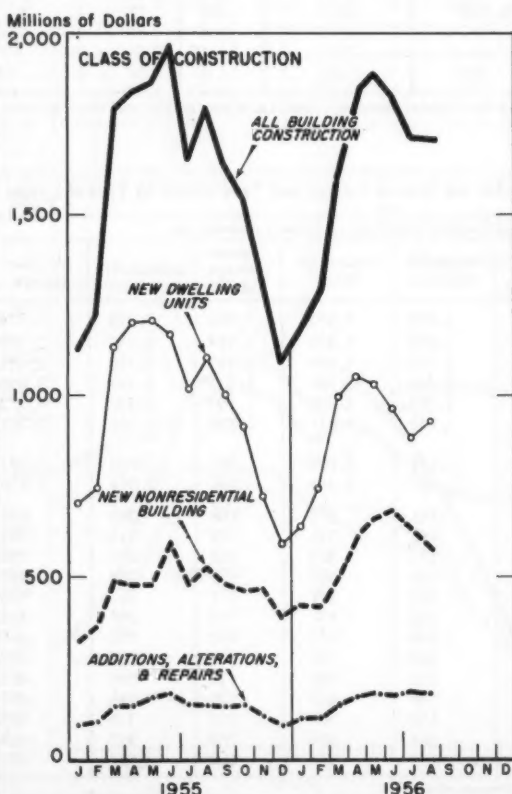
Type of building construction	Valuation (in millions of dollars)						Percent change, Aug. 1955-56
	1956			1955	First 8 months		
	Aug.	July	June	Aug.	1956	1955	
All building construction <sup>1</sup> .....	1,709.2	1,716.2	1,828.0	1,793.7	13,188.3	13,305.4	- 5
Private .....	1,573.9	1,560.2	1,588.8	1,630.8	11,920.1	12,143.2	- 3
Public .....	135.3	155.9	239.2	162.9	1,268.1	1,162.2	-17
New dwelling units <sup>2</sup> .....	930.2	887.2	963.2	1,101.1	7,269.1	8,289.1	-16
Number of new dwelling units .....	(84,563)	(81,285)	(88,258)	(108,115)	(677,696)	(833,439)	(-22)
New nonresidential building .....	575.1	635.6	682.3	526.0	4,541.4	3,763.8	+ 9
Commercial buildings .....	187.6	192.8	211.9	195.4	1,443.9	1,268.1	- 4
Stores and other mercantile buildings ....	92.0	81.4	85.1	112.8	699.5	695.5	-18
All other commercial buildings .....	95.6	111.4	126.8	82.6	744.4	572.6	+16
Community buildings .....	190.7	208.4	215.9	172.9	1,508.8	1,319.4	+10
Industrial buildings .....	103.0	124.9	113.3	68.4	857.7	521.4	+51
All other nonresidential buildings .....	93.8	109.5	141.2	89.3	731.0	654.9	+ 5
Additions, alterations, and repairs .....	181.1	183.8	173.0	149.4	1,278.5	1,138.2	+21

Source: Department of Labor.

<sup>1</sup> Includes new nonhousekeeping residential building, not shown separately.<sup>2</sup> Housekeeping only.

Chart 5

## Building Permit Activity



SOURCE: DEPARTMENT OF LABOR.

CONSTRUCTION REVIEW C.D. 56-10-E

## CONSTRUCTION REVIEW

25

Table 13.--Building Permit Activity: Valuation, by Type of Building Construction and Region<sup>1</sup>

Type of building construction	Valuation (in millions of dollars)						Percent change, 1st 7 months 1955-56
	1955	1956			First 7 months		
	July	May	June	July	1955	1956	
UNITED STATES							
All building construction <sup>2</sup> .....	1,657.3	1,902.1	1,828.0	1,716.2	11,511.7	11,479.1	(3)
New dwelling units <sup>4</sup> .....	1,016.9	1,039.2	963.2	887.2	7,188.0	6,338.9	-12
New nonresidential building .....	481.4	667.4	682.3	635.6	3,237.8	3,966.3	+22
Commercial buildings .....	178.5	204.8	211.9	192.8	1,072.7	1,256.3	+17
Amusement buildings .....	9.8	14.4	10.7	12.3	67.3	70.5	+5
Commercial garages .....	5.8	5.9	6.8	7.0	37.1	36.8	-1
Gasoline and service stations .....	11.3	16.2	15.2	13.7	81.1	92.8	+14
Office buildings .....	61.2	66.2	94.1	78.4	304.4	448.6	+47
Stores and other mercantile bldgs..	90.4	102.1	85.1	81.4	582.7	607.5	+4
Community buildings .....	154.6	208.1	215.9	208.4	1,146.5	1,318.1	+15
Educational buildings .....	97.4	125.2	149.7	110.7	728.8	852.2	+17
Institutional buildings .....	18.8	37.8	26.8	51.8	182.4	199.9	+10
Religious buildings .....	38.3	45.1	39.3	45.8	235.4	265.9	+13
Garages, private residential .....	18.9	22.3	20.6	21.8	104.1	112.1	+8
Industrial buildings .....	69.1	139.2	113.3	124.9	453.0	754.7	+67
Public buildings .....	23.9	37.9	65.1	30.5	194.4	200.4	+3
Public utilities buildings .....	20.3	30.0	34.0	36.9	157.1	184.9	+18
All other nonresidential buildings ....	16.2	25.1	21.4	20.3	110.0	139.8	+27
Additions, alterations, and repairs .....	150.9	181.9	173.0	183.8	988.8	1,097.4	+11
Northeast							
All building construction <sup>2</sup> .....	376.0	401.7	427.5	341.8	2,516.8	2,432.0	-3
New dwelling units <sup>4</sup> .....	235.9	238.0	224.5	186.5	1,564.1	1,352.6	-14
New nonresidential building .....	106.7	121.4	163.0	114.5	716.2	833.5	+16
Commercial buildings .....	39.2	33.3	60.8	36.7	228.3	254.8	+12
Amusement buildings .....	1.6	2.2	2.8	1.7	11.1	15.6	+41
Commercial garages .....	1.4	1.4	1.4	2.3	10.9	11.9	+9
Gasoline and service stations .....	1.5	2.9	3.0	2.2	13.7	16.4	+20
Office buildings .....	19.4	12.3	36.5	18.3	88.5	105.0	+19
Stores and other mercantile bldgs..	15.4	14.5	17.0	12.2	104.0	105.8	+2
Community buildings .....	38.6	42.1	59.2	45.8	273.9	336.7	+23
Educational buildings .....	27.8	24.8	46.3	25.7	187.5	224.3	+20
Institutional buildings .....	1.7	8.2	5.8	13.1	33.7	58.5	+74
Religious buildings .....	9.0	9.2	7.2	7.0	52.7	53.9	+2
Garages, private residential .....	4.0	4.7	4.6	4.2	22.3	22.7	+2
Industrial buildings .....	18.1	19.6	21.3	16.1	112.0	138.0	+23
Public buildings .....	1.9	13.6	4.1	2.4	18.7	27.7	+48
Public utilities buildings .....	1.9	4.0	7.5	4.6	32.4	27.3	-16
All other nonresidential buildings ....	3.1	4.1	5.5	4.7	28.6	26.4	-8
Additions, alterations, and repairs .....	32.1	39.2	38.1	39.6	217.2	231.9	+7
North Central							
All building construction <sup>2</sup> .....	511.0	622.6	563.5	555.8	3,378.2	3,476.4	+3
New dwelling units <sup>4</sup> .....	317.0	333.9	318.6	292.2	2,121.1	1,973.1	-7
New nonresidential building .....	145.8	232.2	194.9	208.8	974.1	1,184.8	+22
Commercial buildings .....	47.3	71.8	46.8	59.4	285.4	348.6	+22
Amusement buildings .....	3.4	2.3	4.9	6.4	23.4	22.0	-6
Commercial garages .....	2.4	1.8	2.1	1.0	9.9	8.2	-17
Gasoline and service stations .....	3.6	5.2	5.2	4.3	25.4	27.1	+7
Office buildings .....	12.2	26.8	12.0	27.5	66.9	117.7	+76
Stores and other mercantile bldgs..	25.6	35.7	22.6	20.1	159.8	173.4	+9
Community buildings .....	46.5	56.1	68.9	76.5	353.6	390.9	+11
Educational buildings .....	31.3	36.9	44.6	37.7	218.1	251.4	+15
Institutional buildings .....	3.5	6.4	12.4	17.7	63.2	55.0	-13
Religious buildings .....	11.7	12.8	11.9	21.1	72.3	84.5	+17
Garages, private residential .....	10.4	12.5	11.9	12.4	52.7	58.9	+12
Industrial buildings .....	18.9	69.8	39.9	38.9	156.9	256.3	+63
Public buildings .....	9.6	2.6	10.5	7.2	54.3	38.0	-30
Public utilities buildings .....	11.5	10.5	13.3	10.9	57.5	64.6	+12
All other nonresidential buildings ....	1.7	8.9	3.6	3.6	13.7	27.7	+102
Additions, alterations, and repairs .....	46.0	53.4	47.5	52.0	269.4	299.8	+11

See footnotes at end of table.

## CONSTRUCTION REVIEW

Table 13.--Building Permit Activity: Valuation, by Type of Building Construction and Region <sup>1</sup>--Continued

Type of building construction	Valuation (in millions of dollars)						Percent change, 1st 7 months 1955-56
	1955	1956			First 7 months		
	July	May	June	July	1955	1956	
	South						
All building construction <sup>2</sup> .....	382.5	455.3	401.5	393.2	2,900.7	2,740.0	- 6
New dwelling units <sup>4</sup> .....	214.3	238.6	198.6	200.1	1,707.2	1,476.0	-14
New nonresidential building .....	124.9	164.7	155.6	139.0	882.3	946.8	+ 7
Commercial buildings .....	56.7	63.7	52.6	49.9	327.9	372.4	+14
Amusement buildings .....	2.7	4.0	1.7	1.5	22.2	16.0	-28
Commercial garages .....	.9	2.1	2.2	1.1	12.3	9.2	-25
Gasoline and service stations .....	4.1	5.2	4.8	4.7	26.1	32.5	+25
Office buildings.....	21.6	19.3	19.0	18.4	89.4	134.0	+50
Stores and other mercantile bldgs..	27.4	33.2	24.9	24.2	177.9	180.7	+ 2
Community buildings.....	37.2	52.3	48.1	47.9	312.2	312.4	(3)
Educational buildings.....	19.2	27.4	31.3	25.1	171.7	182.0	+ 6
Institutional buildings .....	6.2	12.0	5.8	11.1	60.4	50.2	-17
Religious buildings.....	11.7	12.9	10.9	11.7	80.1	80.3	(3)
Garages, private residential .....	1.6	1.9	1.5	1.5	11.2	11.4	+ 2
Industrial buildings.....	14.9	18.6	20.3	16.9	75.7	112.9	+49
Public buildings .....	5.7	13.9	26.7	5.0	76.7	62.6	-18
Public utilities building.....	3.5	10.1	2.3	14.1	47.7	52.1	+ 9
All other nonresidential buildings ....	5.3	4.1	4.1	3.7	30.8	23.0	-25
Additions, alterations, and repairs.....	40.7	47.7	44.5	50.2	274.2	294.3	+ 7
	West						
All building construction <sup>2</sup> .....	387.8	422.5	435.6	425.4	2,716.0	2,830.7	+ 4
New dwelling units <sup>4</sup> .....	249.7	228.6	221.6	208.3	1,795.6	1,537.1	-14
New nonresidential building .....	104.0	149.1	168.8	173.2	665.2	1,001.0	+50
Commercial buildings .....	35.3	35.9	51.8	46.9	231.0	280.6	+21
Amusement buildings .....	2.1	5.9	1.3	2.7	10.6	16.9	+59
Commercial garages .....	1.0	.7	1.1	2.6	4.0	7.5	+88
Gasoline and service stations .....	2.1	2.9	2.1	2.5	15.9	16.8	+ 6
Office buildings.....	8.0	7.8	26.7	14.3	59.5	92.0	+55
Stores and other mercantile bldgs..	22.0	18.6	20.6	24.8	140.9	147.4	+ 5
Community buildings.....	32.3	57.6	39.7	38.2	206.7	278.1	+35
Educational buildings.....	19.1	36.1	27.5	22.2	151.4	194.5	+28
Institutional buildings.....	7.4	11.3	2.9	9.9	25.2	36.2	+44
Religious buildings.....	5.8	10.2	9.3	6.0	30.2	47.3	+57
Garages, private residential .....	2.9	3.2	2.6	3.7	17.8	19.2	+ 8
Industrial buildings.....	17.2	31.2	31.8	53.0	108.4	247.4	+128
Public buildings .....	6.6	7.8	23.8	15.9	44.8	72.1	+61
Public utilities buildings .....	3.5	5.5	10.9	7.2	19.5	40.8	+109
All other nonresidential buildings.....	6.1	8.0	8.2	8.3	36.8	62.8	+71
Additions, alterations, and repairs.....	32.1	41.6	42.9	42.0	228.0	271.4	+19

Source: Department of Labor.

<sup>1</sup> Composition of regions, and nonfarm population distribution by region, are shown below table 2. <sup>2</sup> Includes new nonhousekeeping residential building, not shown separately. <sup>3</sup> Change of less than one-half of 1 percent. <sup>4</sup> Housekeeping only.

Table 14.--Building Permit Activity: Number of Nonresidential Buildings, By Type of Building

Type of building construction	1955		1956						
	July	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Amusement buildings.....	206	92	105	143	186	284	286	277	242
Commercial garages.....	157	143	128	124	216	196	202	173	203
Educational buildings.....	486	342	388	396	463	419	498	562	345
Garages, private residential.....	22,750	6,882	6,758	7,214	14,234	22,588	25,136	23,399	24,705
Gasoline and service stations.....	826	660	643	757	843	940	1,024	974	903
Industrial buildings.....	1,132	938	1,080	1,091	1,349	1,550	1,487	1,359	1,191
Institutional buildings.....	75	49	62	52	78	83	79	88	111
Office buildings.....	610	434	512	582	715	742	710	710	639
Religious buildings.....	306	301	315	361	471	607	613	564	572
Stores & other mercantile bldgs..	2,854	2,056	2,137	2,566	3,160	3,504	3,446	2,839	2,940

Source: Department of Labor.



Table 15.—Building Permit Activity: Valuation and Number of New Dwelling Units, by Type of Structure, Public-Private Ownership, and Region <sup>1</sup>

(Housekeeping units only)

Ownership and type of structure	Valuation (in millions of dollars)					Number of dwelling units				
	1955		1956		First 7 months	1955		1956		First 7 months
	July	June	July	1955	1956	July	June	July	1955	1956
<b>UNITED STATES</b>										
All new dwelling units..	1,016.9	963.2	887.2	7,188.0	6,338.9	98,319	88,258	81,285	725,324	593,133
Privately owned .....	1,007.7	937.1	881.1	7,097.2	6,233.0	97,497	85,710	80,530	715,518	582,674
1-family .....	953.9	878.2	824.6	6,628.2	5,808.5	89,444	76,546	71,881	640,507	516,982
2-4 family .....	23.5	25.2	25.1	187.6	184.0	3,567	3,817	3,617	29,938	27,256
5-or-more family ....	30.3	33.7	31.4	281.4	240.5	4,486	5,347	5,032	45,073	38,436
Publicly owned .....	9.2	26.1	6.1	90.8	105.9	822	2,548	755	9,806	10,459
<b>Northeast</b>										
All new dwelling units..	235.9	224.5	186.5	1,564.1	1,352.6	22,335	20,040	16,792	153,145	122,683
Privately owned .....	229.5	214.3	180.6	1,513.4	1,291.0	21,846	18,864	16,057	147,630	116,513
1-family .....	212.4	201.9	171.7	1,360.3	1,194.8	19,618	17,178	14,932	127,476	103,518
2-4 family .....	4.4	5.7	6.2	38.2	43.3	596	799	823	5,486	5,881
5-or-more family ....	12.7	6.6	2.7	114.8	52.9	1,632	887	302	14,668	7,114
Publicly owned .....	6.4	10.2	6.0	50.7	61.6	489	1,176	735	5,515	6,170
<b>North Central</b>										
All new dwelling units..	317.0	318.6	292.2	2,121.1	1,973.1	26,850	25,934	23,090	183,022	158,667
Privately owned .....	315.3	313.3	292.2	2,105.0	1,953.9	26,676	25,434	23,090	181,329	156,702
1-family .....	306.3	298.4	279.8	2,018.1	1,867.3	25,640	23,671	21,522	170,856	146,731
2-4 family .....	7.1	7.8	6.3	52.7	52.7	779	901	620	5,947	5,509
5-or-more family ....	2.0	7.1	6.1	34.2	33.9	257	862	948	4,526	4,462
Publicly owned .....	1.7	5.3	0	16.2	19.3	174	500	0	1,693	1,965
<b>South</b>										
All new dwelling units..	214.3	198.6	200.1	1,707.2	1,476.0	24,156	20,938	21,150	198,790	157,756
Privately owned .....	213.3	195.9	200.1	1,695.9	1,459.9	24,008	20,715	21,150	197,514	156,205
1-family .....	204.0	187.6	187.2	1,611.3	1,372.2	22,136	18,918	18,952	179,171	140,800
2-4 family .....	4.2	4.3	4.5	39.0	32.9	926	848	841	8,462	6,573
5-or-more family ....	5.1	4.0	8.5	45.6	55.0	946	949	1,357	9,881	8,832
Publicly owned .....	1.0	2.7	0	11.3	16.0	148	223	0	1,276	1,551
<b>West</b>										
All new dwelling units..	249.7	221.6	208.3	1,795.6	1,537.1	24,978	21,346	20,253	190,367	154,027
Privately owned .....	249.5	213.7	208.2	1,783.0	1,528.1	24,967	20,697	20,233	189,045	153,254
1-family .....	231.2	190.3	185.9	1,638.5	1,374.3	22,050	16,779	16,475	163,004	125,933
2-4 family .....	7.9	7.5	8.2	57.7	55.2	1,266	1,269	1,333	10,043	9,293
5-or-more family ....	10.5	16.0	14.0	86.8	98.6	1,651	2,649	2,425	15,998	18,028
Publicly owned .....	.1	7.9	.2	12.6	9.0	11	649	20	1,322	773

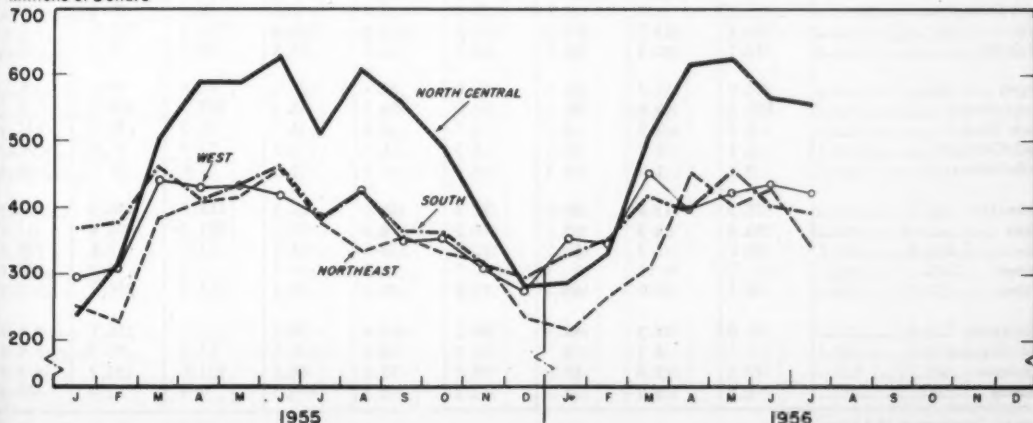
Source: Department of Labor.

<sup>1</sup> Composition of regions, and nonfarm population distribution by region, are shown below table 2.

Chart 16.

## Building Permit Activity, By Regions

Millions of Dollars



SOURCE: DEPARTMENT OF LABOR.

CONSTRUCTION REVIEW C.D. 56-10-F

## CONSTRUCTION REVIEW

Table 16.--Building Permit Activity: Valuation, by Metropolitan-Nonmetropolitan Location and by State

State	(Millions of dollars)								Percent change, 1st 6 mos. 1955-56
	1955	1956					First 6 months		
	June	Feb.	Mar.	Apr.	May	June	1955	1956	
ALL STATES .....	1,968.2	1,299.2	1,677.1	1,863.0	1,902.1	1,828.0	9,854.4	9,762.9	- 1
Metropolitan areas .....	1,581.2	1,040.6	1,302.8	1,441.7	1,504.3	1,441.4	7,920.3	7,668.0	- 3
Nonmetropolitan areas .....	387.0	258.6	374.3	421.3	397.8	386.6	1,934.1	2,094.9	+ 8
Alabama .....	16.5	14.0	15.1	13.9	17.0	14.5	85.4	88.4	+ 4
Arizona .....	13.3	18.4	15.7	12.2	19.3	18.4	87.3	95.0	+ 9
Arkansas .....	4.4	5.1	6.0	5.7	5.7	5.0	28.4	30.8	+ 8
California .....	283.9	254.7	314.9	269.8	286.7	281.5	1,603.8	1,649.9	+ 3
Colorado .....	24.1	22.6	22.8	25.5	20.7	28.8	143.0	139.6	- 2
Connecticut .....	37.0	32.0	22.0	37.6	37.9	41.0	187.1	187.1	0
Delaware .....	6.2	2.8	3.7	5.2	5.0	6.3	30.7	29.0	- 6
District of Columbia .....	16.0	2.5	5.4	3.1	5.5	4.5	61.7	23.7	-62
Florida .....	69.6	70.1	70.1	69.1	73.8	75.0	379.7	420.0	+11
Georgia .....	23.8	19.8	24.6	20.0	26.7	23.0	138.3	132.6	- 4
Idaho .....	4.0	1.1	3.9	4.4	6.3	3.6	17.7	20.6	+16
Illinois .....	127.7	86.2	137.4	138.5	138.6	124.7	638.9	703.0	+10
Indiana .....	39.8	27.0	30.8	39.9	45.2	41.0	189.6	204.0	+ 8
Iowa .....	23.2	9.0	16.2	21.1	21.4	18.9	94.7	92.5	- 2
Kansas .....	34.1	12.1	20.4	14.6	13.2	10.9	108.0	81.0	-25
Kentucky .....	17.7	10.6	13.0	19.4	20.0	14.1	82.8	83.7	+ 1
Louisiana .....	28.6	22.0	27.8	27.6	30.5	20.5	166.2	152.4	- 8
Maine .....	2.7	2.0	1.4	2.8	4.6	4.4	12.7	16.9	+33
Maryland .....	62.5	33.5	41.6	39.5	46.1	40.1	282.2	224.3	-21
Massachusetts .....	47.1	25.6	36.9	50.2	45.1	39.2	225.1	228.5	+ 2
Michigan .....	117.5	67.2	89.3	119.4	124.5	97.1	553.9	549.7	- 1
Minnesota .....	50.3	17.1	26.2	46.0	51.9	41.0	207.6	193.4	- 7
Mississippi .....	6.3	3.9	4.9	6.2	5.0	3.8	27.9	27.6	- 1
Missouri .....	34.9	20.2	31.5	37.4	26.6	28.4	169.2	161.6	- 4
Montana .....	3.1	1.2	5.6	3.4	5.0	5.5	18.7	21.8	+17
Nebraska .....	10.6	4.9	7.8	8.9	7.2	8.0	56.1	39.8	-29
Nevada .....	7.7	3.1	6.1	5.1	3.9	3.1	42.2	25.1	-41
New Hampshire .....	3.4	1.1	2.0	4.2	6.2	3.8	17.9	18.4	+ 3
New Jersey .....	82.3	65.1	70.1	90.9	83.8	69.2	417.0	427.9	+ 3
New Mexico .....	9.1	5.6	5.7	6.1	6.8	5.9	49.0	37.2	-24
New York .....	173.4	92.2	111.5	167.3	133.8	161.0	785.4	748.2	- 5
North Carolina .....	18.9	21.1	21.3	19.1	29.5	17.4	120.3	123.9	+ 3
North Dakota .....	6.1	.4	.9	7.1	5.0	6.6	18.6	20.4	+10
Ohio .....	132.8	63.7	101.1	119.8	132.0	137.8	591.4	621.0	+ 5
Oklahoma .....	14.2	10.4	11.6	11.4	13.9	13.5	86.1	71.3	-17
Oregon .....	15.9	12.0	14.5	16.9	23.9	21.1	83.8	99.0	+18
Pennsylvania .....	107.5	45.9	68.3	94.9	84.1	93.3	465.5	426.6	- 8
Rhode Island .....	5.4	2.9	2.9	4.7	4.4	14.1	26.2	31.7	+21
South Carolina .....	6.4	9.0	6.6	6.5	7.7	6.0	52.2	41.8	-20
South Dakota .....	3.5	1.0	3.4	4.7	4.5	5.3	17.6	21.1	+20
Tennessee .....	21.9	12.8	19.9	21.4	20.3	19.1	116.2	110.3	- 5
Texas .....	90.0	82.3	88.4	77.1	84.3	75.0	561.2	494.4	-12
Utah .....	16.8	7.1	12.0	11.3	12.0	13.0	62.9	87.6	+39
Vermont .....	.6	.1	.3	.7	1.9	1.5	4.0	4.9	+23
Virginia .....	54.7	29.0	46.1	45.0	58.0	55.5	263.2	259.1	- 2
Washington .....	36.9	20.3	46.3	39.2	35.9	51.8	210.4	216.7	+ 3
West Virginia .....	7.5	4.1	4.7	6.0	6.2	7.9	35.5	33.5	- 6
Wisconsin .....	47.5	22.9	35.6	59.6	52.6	43.6	221.6	233.2	+ 5
Wyoming .....	1.8	1.2	3.0	2.2	2.1	3.1	9.4	12.9	+37

Source: Department of Labor.

## CONSTRUCTION REVIEW

29

Table 17.—Building Permit Activity: Number of New Dwelling Units, by Metropolitan-Nonmetropolitan Location and by State

(Housekeeping units only)\*

State	1955	1956					First 6 months		Percent change, 1st 6 mos. 1955-56
	June	Feb.	Mar.	Apr.	May	June	1955	1956	
<b>ALL STATES</b> .....	115,221	71,110	94,623	98,116	96,114	88,258	627,005	511,848	-18
Metropolitan areas .....	91,924	55,052	73,636	74,414	73,941	67,756	500,390	394,229	-21
Nonmetropolitan areas .....	23,297	16,058	20,987	23,702	22,173	20,502	126,615	117,619	-7
Alabama .....	1,176	858	1,131	994	1,252	1,078	7,133	6,368	-11
Arizona .....	1,095	958	1,267	887	1,334	826	8,044	6,248	-22
Arkansas .....	301	254	465	402	306	274	2,444	1,960	-20
California .....	18,373	16,298	18,869	16,382	16,045	14,885	117,306	96,912	-17
Colorado .....	1,727	1,008	1,595	1,541	1,492	1,667	11,172	8,454	-24
Connecticut .....	2,091	1,162	1,270	1,812	1,861	2,014	9,648	8,843	-8
Delaware .....	528	129	215	318	166	316	2,196	1,519	-31
District of Columbia .....	287	42	375	79	317	128	2,039	974	-52
Florida .....	4,739	4,979	5,027	4,929	5,043	4,623	28,218	29,245	+4
Georgia .....	1,904	1,538	1,627	1,559	1,628	1,411	11,073	9,196	-17
Idaho .....	181	39	133	188	196	158	999	775	-22
Illinois .....	6,836	3,654	6,725	6,659	5,944	5,970	35,367	32,278	-9
Indiana .....	2,338	1,004	1,626	2,064	1,981	1,736	10,880	9,434	-13
Iowa .....	1,337	368	827	1,085	982	1,130	5,164	4,673	-10
Kansas .....	1,100	719	963	847	845	676	6,055	4,707	-22
Kentucky .....	1,182	480	872	1,150	1,006	894	6,247	4,884	-22
Louisiana .....	1,446	772	1,077	1,552	1,146	763	8,075	6,189	-23
Maine .....	191	18	67	158	238	173	703	683	-3
Maryland .....	2,827	1,964	2,499	2,572	2,195	1,922	17,708	12,516	-29
Massachusetts .....	2,816	1,986	1,995	2,339	2,638	2,124	13,495	12,133	-10
Michigan .....	6,816	3,632	5,061	5,687	4,650	4,912	31,909	26,730	-16
Minnesota .....	2,156	548	1,281	2,088	1,960	1,571	9,740	8,001	-18
Mississippi .....	379	282	295	238	255	276	1,999	1,670	-16
Missouri .....	1,844	1,037	1,450	1,568	1,307	1,244	9,200	7,537	-18
Montana .....	204	65	151	193	226	209	1,059	892	-16
Nebraska .....	610	243	589	569	463	479	3,316	2,545	-23
Nevada .....	470	164	491	353	204	89	2,145	1,510	-30
New Hampshire .....	225	67	107	202	263	195	1,103	894	-19
New Jersey .....	5,141	4,332	4,046	4,529	4,699	3,886	27,764	23,636	-15
New Mexico .....	617	338	385	425	411	425	3,644	2,202	-40
New York .....	11,076	4,636	6,821	7,332	6,826	7,805	51,109	38,858	-24
North Carolina .....	1,163	1,318	1,126	1,051	1,121	854	7,517	6,335	-16
North Dakota .....	175	10	40	261	215	204	820	752	-8
Ohio .....	6,965	2,828	4,455	5,334	5,523	5,971	31,515	26,749	-15
Oklahoma .....	894	702	706	684	700	754	5,942	4,071	-31
Oregon .....	699	451	680	738	923	633	4,093	3,837	-6
Pennsylvania .....	5,217	1,866	3,635	4,388	4,241	3,520	24,909	19,172	-23
Rhode Island .....	405	193	257	311	326	294	1,919	1,515	-21
South Carolina .....	467	440	428	350	376	299	2,961	2,277	-23
South Dakota .....	322	43	140	221	204	161	1,217	811	-33
Tennessee .....	1,611	861	1,260	1,240	1,131	1,082	9,951	6,689	-33
Texas .....	6,160	4,213	5,048	4,198	4,437	3,600	40,836	25,762	-37
Utah .....	1,041	469	753	583	733	815	3,988	3,789	-5
Vermont .....	34	8	12	42	48	29	160	157	-2
Virginia .....	3,306	2,206	2,613	3,024	3,702	2,380	18,605	15,371	-17
Washington .....	2,082	1,050	1,668	1,744	1,568	1,550	12,305	8,552	-30
West Virginia .....	323	194	308	334	313	284	1,690	1,580	-7
Wisconsin .....	2,245	1,219	2,036	2,789	2,553	1,880	10,989	11,360	+3
Wyoming .....	99	65	156	123	101	89	634	603	-5

Source: Department of Labor.

## CONSTRUCTION REVIEW

Table 18.—Building Permit Activity: Valuation, in Selected Metropolitan Areas

Metropolitan area	(Millions of dollars)								Percent change, 1st 6 mo. 1955-56
	1955	1956					First 6 months		
	June	Feb.	Mar.	Apr.	May	June	1955	1956	
Atlanta, Ga. ....	15.9	11.0	12.0	11.5	17.5	12.0	88.5	75.2	-15
Baltimore, Md. ....	27.1	19.0	21.7	19.2	16.8	22.1	151.4	112.2	-26
Birmingham, Ala. ....	6.8	4.7	8.0	6.0	7.7	6.0	36.5	38.2	+5
Boston, Mass. ....	28.5	15.5	17.7	28.5	25.3	20.0	126.4	119.0	-6
Buffalo, N. Y. ....	19.0	6.5	23.3	15.1	14.3	18.6	80.0	85.6	+7
Chicago, Ill. ....	115.3	78.2	118.6	122.9	124.0	110.2	566.4	627.2	+11
Cleveland, Ohio ....	36.6	22.8	38.3	39.0	39.4	40.9	173.5	200.4	+16
Columbus, Ohio ....	16.1	7.3	9.1	13.3	17.1	12.7	69.8	70.3	+1
Denver, Colo. ....	14.5	16.7	14.4	17.8	12.8	11.7	92.9	85.2	-8
Detroit, Mich. ....	79.8	49.7	61.1	69.1	87.7	64.0	372.5	369.2	-1
Indianapolis, Ind. ....	11.6	10.4	7.7	9.4	18.9	9.3	54.7	60.2	+10
Los Angeles, Calif. ....	141.5	128.4	159.3	125.5	142.4	146.2	822.5	842.4	+2
Memphis, Tenn. ....	8.0	3.9	6.4	6.7	5.2	5.6	45.2	35.4	-22
Miami, Fla. ....	26.5	16.6	23.1	23.1	28.3	27.7	141.9	137.4	-3
Milwaukee, Wis. ....	15.7	11.1	16.2	21.5	25.0	15.5	90.0	98.2	+9
New York-Northeastern New Jersey	174.3	110.1	115.5	175.9	143.0	163.9	820.5	806.1	-2
Norfolk-Portsmouth, Va. ....	8.7	3.9	5.5	4.0	15.8	11.4	40.3	43.9	+9
Phoenix, Ariz. ....	8.6	12.8	10.7	7.5	11.1	13.3	60.9	62.8	+3
Rochester, N. Y. ....	9.2	3.0	4.6	7.2	7.2	5.8	45.9	30.4	-34
Salt Lake City, Utah ....	7.7	4.6	6.3	5.6	5.5	8.5	31.0	34.7	+12
San Diego, Calif. ....	18.7	13.4	22.4	15.6	16.4	17.0	89.3	94.1	+5
San Francisco-Oakland, Calif. ....	45.0	38.5	45.3	46.3	46.0	45.6	252.0	252.0	0
Seattle, Wash. ....	15.5	10.2	13.6	18.5	12.0	24.1	95.6	87.8	-8
Washington, D. C. ....	60.4	21.1	27.8	32.0	40.4	26.7	238.2	167.3	-30

Source: Department of Labor.

Table 19.—Building Permit Activity: Number of New Dwelling Units, in Selected Metropolitan Areas

Metropolitan area	(Housekeeping only)								Percent change, 1st 6 mos. 1955-56
	1955	1956					First 6 months		
	June	Feb.	Mar.	Apr.	May	June	1955	1956	
Atlanta, Ga. ....	1, 125	861	980	922	966	754	6, 522	5, 230	-20
Baltimore, Md. ....	1, 190	1, 091	1, 471	1, 220	1, 013	992	8, 811	6, 412	-27
Birmingham, Ala. ....	522	300	447	355	473	339	2, 842	2, 308	-19
Boston, Mass. ....	1, 297	745	836	997	1, 280	884	6, 149	5, 240	-15
Buffalo, N. Y. ....	1, 205	376	1, 517	900	943	1, 007	5, 608	5, 160	- 8
Chicago, Ill. ....	6, 082	3, 275	5, 863	5, 689	5, 117	5, 204	31, 487	28, 158	-11
Cleveland, Ohio ....	1, 719	806	1, 188	1, 218	1, 173	1, 304	8, 157	6, 411	-21
Columbus, Ohio ....	1, 040	347	491	625	649	785	4, 034	3, 457	-14
Denver, Colo. ....	1, 129	656	1, 068	1, 021	957	702	7, 840	5, 180	-34
Detroit, Mich. ....	4, 423	2, 682	3, 669	3, 466	2, 864	3, 161	21, 282	17, 673	-17
Indianapolis, Ind. ....	747	284	407	473	742	443	3, 086	2, 571	-17
Los Angeles, Calif. ....	9, 449	8, 536	8, 916	8, 115	7, 879	7, 174	60, 022	49, 714	-17
Memphis, Tenn. ....	635	295	415	416	374	295	4, 563	2, 271	-50
Miami, Fla. ....	1, 405	1, 209	1, 677	1, 557	1, 562	1, 573	9, 157	8, 982	-2
Milwaukee, Wis. ....	841	606	921	1, 008	1, 091	790	4, 286	4, 876	+14
New York-Northeastern New Jersey	11, 200	5, 545	6, 644	7, 618	7, 267	8, 051	53, 621	40, 666	-24
Norfolk-Portsmouth, Va. ....	501	270	338	277	1, 379	313	3, 653	2, 802	-23
Phoenix, Ariz. ....	647	699	922	587	916	535	6, 005	4, 312	-28
Rochester, N. Y. ....	565	176	257	294	362	307	2, 572	1, 567	-39
Salt Lake City, Utah ....	621	359	374	316	319	487	2, 231	2, 107	- 6
San Diego, Calif. ....	943	1, 115	1, 336	1, 139	1, 113	1, 031	5, 829	6, 425	+10
San Francisco-Oakland, Calif. ....	2, 807	1, 882	2, 829	2, 264	2, 074	2, 094	17, 243	12, 360	-28
Seattle, Wash. ....	842	637	747	821	686	622	5, 593	3, 998	-29
Washington, D. C. ....	2, 704	1, 137	1, 544	2, 322	1, 898	1, 400	13, 616	9, 235	-32

Source: Department of Labor.



## CONSTRUCTION REVIEW

31

Table 20.—Building Permit Activity: Valuation in Selected Metropolitan Areas by Type of Building Construction

June 1956 (Thousands of dollars)

Type of building construction	Atlanta, Ga.	Baltimore, Md.	Birmingham, Ala.	Boston, Mass.	Buffalo, N. Y.	Chicago, Ill.	Cleveland, Ohio	Columbus, Ohio
All building construction <sup>1</sup>	11,977	22,078	6,005	20,010	18,648	110,236	40,893	12,692
New dwelling units <sup>2</sup>	7,589	11,261	3,085	10,017	10,470	73,274	20,802	10,295
New nonresidential building	2,792	9,640	1,912	7,036	7,199	29,257	16,441	1,744
Commercial buildings	1,908	1,047	862	1,775	2,290	6,489	4,137	262
Amusement buildings	51	129	25	13	312	807	1,506	0
Commercial garages	39	0	0	137	20	61	29	0
Gasoline and service stations	187	253	47	121	125	656	109	52
Office buildings	189	311	470	101	323	1,408	1,376	0
Stores and other mercantile bldgs.	1,443	355	320	1,403	1,511	3,558	1,117	210
Community buildings	515	2,255	777	2,089	1,233	9,204	2,627	1,117
Educational buildings	15	1,903	596	1,634	979	8,524	2,140	920
Institutional buildings	110	10	0	0	0	0	259	0
Religious buildings	391	342	181	455	254	680	228	197
Garages, private residential	24	68	21	187	427	2,449	857	197
Industrial buildings	285	5,727	28	2,130	740	8,970	8,087	32
Public buildings	0	334	0	805	0	0	165	0
Public utilities buildings	0	24	5	31	610	1,825	145	1
All other nonresidential buildings	61	184	219	19	1,899	320	423	134
Additions, alterations, and repairs	1,595	1,169	1,008	2,949	944	7,308	2,354	654
	Denver, Colo.	Detroit, Mich.	Indianapolis, Ind.	Los Angeles, Calif.	Memphis, Tenn.	Miami, Fla.	Milwaukee, Wis.	New York-Northeastern New Jersey
All building construction <sup>1</sup>	11,710	63,950	9,265	146,203	5,558	27,717	15,473	163,935
New dwelling units <sup>2</sup>	7,175	39,399	5,036	74,979	2,215	13,853	9,794	90,755
New nonresidential building	3,024	17,528	3,668	54,343	2,462	9,601	4,787	61,027
Commercial buildings	435	6,260	1,994	24,309	103	4,127	712	31,814
Amusement buildings	23	93	85	313	2	252	0	503
Commercial garages	0	979	0	396	0	0	11	231
Gasoline and service stations	161	713	119	213	43	134	68	866
Office buildings	151	906	187	17,087	17	2,177	288	26,199
Stores and other mercantile bldgs.	101	3,568	1,603	6,301	41	1,564	345	4,015
Community buildings	403	4,806	757	10,239	206	3,796	2,659	17,761
Educational buildings	256	4,131	757	7,710	0	3,713	1,175	14,777
Institutional buildings	0	129	0	472	107	36	1,059	1,075
Religious buildings	147	546	0	2,057	99	48	425	1,909
Garages, private residential	220	2,547	127	640	96	73	455	1,241
Industrial buildings	1,851	2,318	776	7,823	1,854	507	231	6,504
Public buildings	20	0	0	949	0	873	0	1,148
Public utilities buildings	3	1,156	14	5,833	0	37	725	451
All other nonresidential buildings	91	442	0	4,550	203	187	6	2,108
Additions, alterations, and repairs	1,404	6,733	561	16,505	882	3,860	891	11,071
	Norfolk-Portsmouth, Va.	Phoenix, Ariz.	Rochester, N. Y.	Salt Lake City, Utah	San Diego, Calif.	San Francisco-Oakland, Calif.	Seattle, Wash.	Washington, D. C.
All building construction <sup>1</sup>	11,433	13,286	5,795	8,458	16,967	45,635	24,116	26,739
New dwelling units <sup>2</sup>	2,781	5,796	4,001	5,588	10,472	22,152	6,986	16,031
New nonresidential building	7,974	6,750	1,053	2,430	4,811	17,850	15,035	7,058
Commercial buildings	1,673	2,619	423	1,625	997	3,813	681	2,642
Amusement buildings	0	2	160	0	127	25	117	20
Commercial garages	0	0	27	0	9	595	0	36
Gasoline and service stations	108	43	45	22	14	143	58	81
Office buildings	0	711	70	1,346	191	1,054	383	871
Stores and other mercantile bldgs.	1,566	1,864	121	257	655	1,996	122	1,635
Community buildings	1,515	2,433	225	600	220	3,995	2,800	2,102
Educational buildings	1,497	2,546	225	0	40	2,174	2,726	1,443
Institutional buildings	0	0	0	0	0	52	0	100
Religious buildings	18	87	0	600	180	1,769	74	559
Garages, private residential	62	25	170	98	219	176	57	46
Industrial buildings	123	462	219	71	1,825	2,691	10,456	14
Public buildings	4,588	955	0	0	1,299	6,451	698	1,786
Public utilities buildings	3	0	0	0	19	18	178	349
All other nonresidential buildings	10	257	17	36	231	707	165	119
Additions, alterations, and repairs	678	710	741	441	1,631	5,526	2,095	3,317

Source: Department of Labor. <sup>1</sup> Includes new nonhousekeeping residential building, not shown separately.<sup>2</sup> Housekeeping only.

## Part IV--Contract Awards

Table 21.--Contract Awards: Public Construction, by Ownership and Type of Construction <sup>1</sup>

Ownership and type of construction <sup>2</sup>	Value (in millions of dollars)									Percent change, 1st 7 mos. 1955-56
	1955	1956						First 7 months		
	July	Feb.	Mar.	Apr.	May	June	July	1955	1956	
ALL PUBLIC CONSTRUCTION .....	709.5	648.1	878.4	920.1	852.7	1,086.6	1,079.6	5,220.6	6,273.3	+20
FEDERALLY OWNED .....	47.8	119.6	178.8	208.2	163.0	327.8	164.3	924.3	1,276.3	+38
Residential building .....	1.2	12.7	7.6	7.1	9.3	12.0	.4	23.1	52.1	+126
Nonresidential building .....	28.3	39.8	88.3	112.7	77.7	163.6	41.2	590.5	571.6	-3
Educational .....	.8	(3)	3.0	2.9	.5	4.3	2.3	3.7	13.2	+257
Hospital and institutional .....	1.2	.3	4.5	3.5	10.9	5.2	3.4	68.1	33.3	-51
Administrative and general .....	1.4	4.2	8.4	6.5	17.0	20.5	6.1	29.0	65.5	+126
Other nonresidential building .....	24.9	35.3	72.4	99.8	49.3	133.6	29.4	489.7	459.6	-6
Airfield building .....	1.5	7.2	8.4	4.2	6.6	8.8	4.1	88.0	51.2	-42
Industrial .....	10.4	7.0	41.9	38.4	21.0	44.5	9.3	208.7	172.0	-18
Troop housing .....	.6	9.0	1.6	8.1	1.2	40.1	6.1	36.6	77.0	+110
Warehouses .....	7.8	1.3	2.5	32.6	4.9	4.0	4.5	61.6	51.0	-17
All other .....	4.6	10.8	18.0	16.5	15.6	36.2	5.4	94.8	108.4	+14
Airfields .....	3.1	17.1	7.5	17.2	7.5	17.7	6.1	98.9	88.5	-11
Conservation and development .....	9.4	29.2	66.9	51.1	28.6	41.6	54.8	119.7	313.3	+162
Highway .....	4.5	8.4	2.9	4.8	6.6	17.3	4.9	37.0	47.1	+27
Electric power .....	.5	5.5	2.1	5.0	28.2	64.3	53.0	21.3	160.1	(4)
All other federally owned .....	.8	6.9	3.5	10.3	5.1	11.3	3.9	33.8	43.6	+29
STATE AND LOCALLY OWNED .....	661.7	528.5	699.6	711.9	689.7	758.8	915.3	4,296.3	4,997.0	+16
Residential building .....	18.1	22.0	38.8	18.3	21.1	22.7	21.4	120.2	154.8	+29
Nonresidential building .....	284.9	186.0	279.4	296.8	295.1	287.5	284.4	1,714.2	1,884.1	+10
Educational .....	215.7	145.1	215.4	204.1	205.9	184.1	199.2	1,260.1	1,346.6	+7
Hospital and institutional .....	15.5	9.4	12.4	25.0	34.3	28.0	24.2	120.6	168.8	+40
Administrative and general .....	22.5	17.4	32.6	30.6	21.8	40.1	26.1	150.0	178.9	+19
Other nonresidential building .....	31.2	14.1	19.0	37.1	33.1	35.3	34.9	183.5	189.8	+3
Highway .....	255.8	234.3	279.0	265.3	249.1	305.1	349.3	1,643.7	1,928.4	+17
Sewerage systems .....	38.7	30.5	42.9	51.3	45.0	60.1	49.3	279.4	393.7	+41
Water supply facilities .....	26.5	26.7	30.6	38.3	33.3	44.0	76.2	187.5	278.2	+48
Utilities .....	28.0	20.0	11.2	23.1	31.6	27.7	118.2	281.5	260.9	-7
Electric power .....	4.7	5.7	2.6	12.4	7.9	8.6	103.6	170.8	156.2	-9
Other utilities .....	23.3	14.3	8.6	10.7	23.7	19.1	14.6	110.7	104.7	-5
All other State and locally owned .....	9.7	9.0	17.7	18.8	14.5	11.7	16.5	69.8	96.9	+39

Source: Departments of Commerce and Labor.

<sup>1</sup> Includes major force-account projects started, principally by TVA and State highway departments.<sup>2</sup> Types not shown separately are included in the appropriate "other" category.<sup>3</sup> Less than \$50,000.<sup>4</sup> Percent increase exceeds 300.Table 22.--Contract Awards: Highway Construction, by Ownership, Source of Funds, and Type of Facility <sup>1</sup>

Ownership, source of funds, and type of facility	Value (in millions of dollars)									Percent change, 1st 7 mos. 1955-%
	1955	1956						First 7 months		
	July	Feb.	Mar.	Apr.	May	June	July	1955	1956	
ALL HIGHWAY CONSTRUCTION.....	260.3	242.7	281.9	270.1	255.7	322.4	354.2	1,680.7	1,975.5	+18
FEDERALLY OWNED .....	4.5	8.4	2.9	4.8	6.6	17.3	4.9	37.0	47.1	+27
STATE OWNED .....	204.3	219.1	254.8	219.0	200.7	248.2	280.4	1,408.4	1,650.2	+17
Federally aided projects:										
Total value .....	115.3	105.4	127.8	127.0	116.8	162.3	149.6	679.6	943.7	+39
Federal funds .....	61.4	53.8	70.3	64.3	61.8	83.9	73.8	362.5	485.1	+34
Independent State projects:										
Total value .....	89.0	113.7	127.0	92.0	83.9	85.9	130.8	728.8	706.5	- 3
Toll facilities .....	30.0	67.3	76.4	17.5	15.1	11.4	50.6	386.9	276.1	-29
LOCALLY OWNED <sup>2</sup> .....	51.5	15.2	24.2	46.3	48.4	56.9	68.9	235.3	278.2	+18

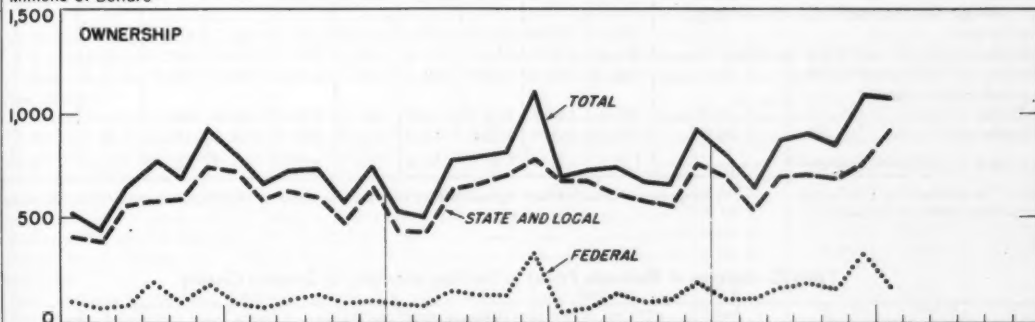
Source: Departments of Commerce and Labor.

<sup>1</sup> Includes force-account work started on Federal and State projects.<sup>2</sup> By municipalities and counties.

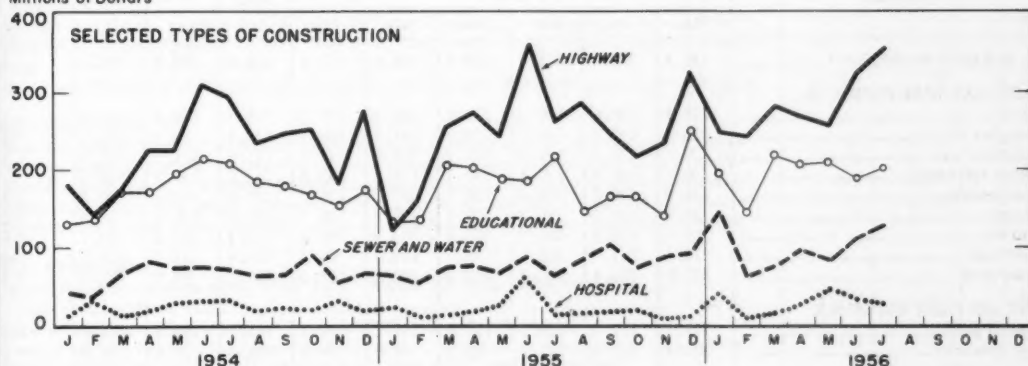
Chart 7.

## Contracts Awarded on Public Construction

Millions of Dollars



Millions of Dollars



SOURCE: DEPARTMENT OF COMMERCE AND LABOR.

CONSTRUCTION REVIEW C.D. 56-10-G

Table 23.—Contracts Awarded in 37 Eastern States

Type of construction	Value (in millions of dollars)			Percent change		
	Aug. 1956	July 1956	First 8 months, 1956	Aug. 1956 from--		First 8 months, 1955-56
				July 1956	Aug. 1955	
<b>TOTAL</b> .....	2,069	2,149	17,416	- 4	+ 9	+ 8
Building construction .....	1,621	1,605	13,533	+ 1	+ 7	+ 5
Residential .....	874	758	7,331	+15	+ 5	+ 1
Nonresidential .....	747	847	6,202	-12	+10	+ 9
Engineering .....	448	544	3,883	-18	+18	+22
Public works .....	301	374	2,829	-20	(1)	+21
Utilities .....	147	170	1,054	-13	+87	+24

Source: Compiled by Department of Commerce from data reported by F. W. Dodge Corporation.

<sup>1</sup>Change of less than one-half of 1 percent.

## Part V—Costs

Table 24.—Construction Cost Indexes

Compiler and coverage	Indexes (1947-49 = 100)									Percent change, Aug. 1955-56
	1956						1953	1954	1955	
	Mar.	Apr.	May	June	July	Aug.	Aug.	Aug.	Aug.	
American Appraisal Company .....	133.0	133.6	134.3	134.9	135.7	136.4	124.0	126.4	130.4	+ 5
Associated General Contractors.....	139.8	139.8	141.0	142.6	144.4	144.4	128.7	133.0	137.0	+ 5
E. H. Boeckh and Associates (20 city average):										
Residences .....	128.0	128.9	129.8	130.1	130.3	130.5	122.1	120.7	124.9	+ 4
Apartments, hotels, and office buildings .....	134.8	135.7	136.9	137.4	138.0	138.3	127.2	127.4	131.8	+ 5
Commercial and factory buildings .....	136.4	137.3	138.4	138.9	139.9	140.2	127.7	128.5	133.4	+ 5
Engineering News-Record (as of Sept. 1):										
Building .....	143.6	144.1	144.5	144.7	145.3	147.9	128.9	134.4	141.7	+ 4
Construction .....	150.8	152.0	152.8	153.4	153.7	155.6	134.8	141.3	148.5	+ 5
Department of Commerce composite <sup>1</sup> .....	128.6	129.4	130.3	130.8	131.3	132.1	123.0	121.8	125.7	+ 5

Source: Department of Commerce.

<sup>1</sup> A composite of cost indexes representative of the major types of construction, weighted by the current relative importance of each type.

Table 25.—Indexes of Wholesale Prices of Building Materials, by Selected Classes

Commodity	Indexes (1947-49 = 100)									Percent change, Aug. 1955-56
	1956						1953	1954	1955	
	Mar.	Apr.	May	June	July	Aug.	Aug.	Aug.	Aug.	
ALL BUILDING MATERIALS <sup>1</sup> .....	130.5	131.3	130.8	130.6	130.6	131.6	120.8	120.8	127.4	+ 3
LUMBER AND WOOD PRODUCTS:										
Lumber .....	129.9	130.6	130.4	129.6	128.5	127.5	119.3	118.7	126.4	+ 1
Douglas fir .....	135.8	136.0	135.7	133.8	131.7	128.9	115.5	124.5	134.1	- 4
Southern pine .....	120.7	120.6	120.2	119.2	119.5	119.1	115.0	111.5	115.3	+ 3
Other softwoods .....	139.7	140.8	140.3	140.2	138.8	138.8	134.0	130.2	138.4	(2)
Hardwoods .....	126.9	128.2	128.4	128.3	127.2	126.6	115.8	112.1	120.4	+ 5
Millwork .....	128.9	128.9	129.2	129.5	129.7	129.5	131.7	129.7	128.3	+ 1
Plywood .....	107.5	106.9	102.7	101.0	103.3	99.2	112.4	105.4	105.7	- 6
Softwood .....	112.1	111.4	103.1	99.7	103.4	95.4	115.4	114.7	110.7	-14
Hardwood .....	105.0	104.4	104.4	104.4	105.2	105.2	110.3	98.8	102.6	+ 3
PAINT AND PAINT MATERIALS:										
Prepared paint .....	119.1	119.1	119.1	119.1	119.1	119.1	110.7	112.8	114.8	+ 4
Paint materials .....	101.4	101.6	101.2	99.4	98.6	98.3	96.0	97.8	97.6	+ 1
METAL PRODUCTS:										
Structural shapes .....	157.5	157.5	157.5	157.5	157.5	170.5	141.9	146.2	157.5	+ 8
Hardware, finish .....	145.8	147.2	147.2	147.2	147.2	150.2	133.4	135.8	139.9	+ 7
Plumbing equipment .....	133.1	133.9	135.0	134.1	134.1	134.1	118.7	118.5	128.1	+ 5
Enameled iron fixtures .....	131.9	125.3	125.3	125.3	125.3	125.3	129.2	129.2	131.9	- 5
Vitreous china fixtures .....	124.1	124.2	124.2	124.2	124.2	124.2	111.7	111.7	123.0	+ 1
Brass fittings .....	138.1	141.9	143.9	143.0	143.0	143.0	117.1	116.5	129.4	+11
Heating equipment .....	117.1	117.3	117.3	117.4	117.9	119.0	115.6	114.1	116.0	+ 3
Furnaces .....	123.8	123.8	124.0	124.0	124.1	126.6	119.7	120.6	122.8	+ 3
Water heaters .....	107.1	107.1	106.6	106.5	108.3	108.3	111.6	108.4	110.9	- 2
Metal sash .....	146.3	146.3	140.9	140.9	139.9	147.5	127.3	131.4	146.4	+ 1
NONMETALLIC MINERAL PRODUCTS:										
Glass, plate .....	137.5	137.5	137.5	137.5	145.7	145.7	132.0	132.0	137.5	+ 6
Glass, window .....	138.8	138.8	138.8	141.2	143.5	143.5	131.3	131.3	138.8	+ 3
Concrete ingredients .....	130.0	130.0	130.1	130.4	130.6	130.7	118.6	122.2	125.3	+ 4
Portland cement .....	138.6	138.9	138.9	139.4	139.8	139.8	123.8	128.3	131.8	+ 6
Concrete products .....	121.1	121.7	121.7	121.9	123.0	123.4	116.1	117.9	118.6	+ 4
Structural clay products .....	145.9	146.0	146.1	146.5	149.3	150.1	131.4	132.3	142.9	+ 5
Gypsum products .....	127.1	127.1	127.1	127.1	127.1	127.1	122.1	122.1	122.1	+ 4
Asphalt roofing .....	106.5	111.9	111.9	111.9	117.9	117.9	105.8	98.6	114.5	+ 3
Insulation materials .....	101.9	101.9	100.7	99.6	100.9	100.9	107.8	110.1	106.7	- 5
MISCELLANEOUS PRODUCTS:										
Building board .....	133.3	138.1	138.1	138.1	138.1	138.1	123.0	127.6	132.7	+ 4
Kitchen cabinets, metal .....	136.5	136.5	136.5	136.5	136.5	136.5	127.2	127.6	133.9	+ 2

Source: Department of Labor.

<sup>1</sup> Includes items not shown separately.<sup>2</sup> Change of less than one-half of 1 percent.



Table 26.—Wholesale Prices of Selected Building Materials

Commodity	Unit	1956		1955
		July	June	July
<b>LUMBER</b>				
Douglas fir:				
Dimension, No. 1, 25% No. 2, green, S4S, 2"x4", R.L., mixed c/l, f.o.b. mill .....	M bd. ft.	\$74.641	\$76.013	\$76.972
Boards, No. 1, 25% No. 2, green, S4S, R.L., 1"x8", loose, mixed c/l of boards and dimension, f.o.b. mill .....	M bd. ft.	66.803	68.086	68.094
Timbers, wide, 8"x8" to 12"x12", R.L., green, f.o.b. mill .....	M bd. ft.	84.399	85.645	76.007
Southern pine:				
Dimension, No. 2 and better, 2"x4"x16", dry, S.L., S4S, f.o.b. mill .....	M bd. ft.	85.765	85.765	80.823
Boards, No. 2 and better, 1"x6", dry, R.L., S4S, f.o.b. mill .....	M bd. ft.	82.425	81.891	77.434
Ponderosa pine boards, No. 3 common, 1"x8", R.L., S2 or 4S, c/l or mixed cars, f.o.b. mill .....	M bd. ft.	79.800	82.210	80.410
Oak, red, flooring, plain, 25/32" thick, 2-1/4" face, select, f.o.b. mill .....	M bd. ft.	196.931	199.509	191.970
Maple flooring 2d grade, 25/32" x2-1/4" face, f.o.b. mill .....	M bd. ft.	202.914	202.081	180.690
Poplar, plain, No. 2B common, 4/4", R.W., f.o.b. mill .....	M bd. ft.	60.000	60.000	55.000
Beech, No. 2 common, 4/4", R.W. & L., f.o.b. mill .....	M bd. ft.	56.000	56.000	47.000
<b>MILLWORK</b>				
Door, Douglas fir, interior, 2 plywood panels, 2'6"x6'8"x1-3/8", f.o.b. factory .....	Each	(1)	(1)	(1)
Door frame, ponderosa pine, exterior, 1-5/16"x2" casing, with sill, f.o.b. factory .....	Each	9.372	9.372	9.326
Window, ponderosa pine, 2-light, check rail, open, f.o.b. factory .....	Each	1.681	1.681	1.662
<b>PLYWOOD</b>				
Douglas fir, interior, grade A-D, 1/4"x48"x96", f.o.b. mill .....	M sq. ft.	76.053	72.251	80.807
Douglas fir, interior, grade C-D, 5/16"x48"x96", f.o.b. mill .....	M sq. ft.	63.695	63.384	70.660
<b>BOARD</b>				
Insulation, fiber, 1/2"x48"x96", interior, f.o.b. plant, freight equalized .....	M sq. ft.	57.500	57.500	54.000
<b>PREPARED PAINT</b>				
Emulsion, water-thinned, inside, delivered .....	Gallon	2.510	2.510	2.399
Varnish, floor, first grade, delivered .....	Gallon	3.874	3.874	3.706
Enamel, white, gloss, first grade, delivered .....	Gallon	4.802	4.802	4.628
Inside, flat, white, first grade, delivered .....	Gallon	3.116	3.116	2.945
Outside, white, first grade, delivered .....	Gallon	4.477	4.477	4.348
<b>METAL PRODUCTS</b>				
Structural shapes, carbon steel, 6"x4"x1/2" angles, 30' long, ASTM spec. A-7, base quantity, f.o.b. mill .....	100 lb.	4.867	4.867	4.867
Bars, reinforcing, carbon steel, 3/4" rounds x 30' long with 10% shorts, spec. ASTM A-15, 50T, base quantity, f.o.b. mill .....	100 lb.	5.313	5.313	5.313
Sheets, galvanized, carbon steel, 24 gage x 30" wide x 96" long, commercial coating, base chemistry, base packaging, base quantity, f.o.b. mill .....	100 lb.	7.770	7.770	7.690
Pipe, standard, black, carbon steel, butt weld, threaded and coupled, 1-1/4" nominal, random lengths, wt. 228 lbs., f.o.b. mill .....	100 ft.	16.997	16.997	16.366
Pipe, standard, galvanized, carbon steel, butt weld, threaded and coupled, 1-1/4" nominal, random lengths, wt. 228 lbs., f.o.b. mill .....	100 ft.	21.137	21.137	19.971
Nails, wire, carbon steel, 8-penny, common, c/l, f.o.b. mill .....	100 lb. bag	8.595	8.595	8.618
Soil pipe, cast iron, 2" to 6", single and double hub, service pipe, extra heavy, f.o.b. foundry, index number (1947-49 = 100) .....	Ton	(106.0)	(106.7)	(111.3)
Aluminum sheets, 3003-H14, hard alloy, mill finish, 0.64"x48"x144", 30,000 lbs. or over, f.o.b. shipping point, freight allowed .....	Pound	\$0.408	\$0.408	\$0.377
Copper water tubing, type L, 3/4" size, 0.045" thick, 2,000 ft. or more in 60' coils (0.455 lbs. per linear ft.), f.o.b. mill, freight allowed .....	Foot	.316	.343	.281
Wire, building, type R, size 12, single braid, f.o.b. destination, or freight prepaid on specified amounts .....	M ft.	21.930	23.120	14.110
Screening, insect, bronze wire, 18x14 mesh, 30" wide, c/l, f.o.b. factory .....	Linear ft. roll	30.780	30.780	24.540
<b>PLUMBING EQUIPMENT</b>				
Bath tub, enameled iron, 5', recessed, f.o.b. factory, freight allowed .....	Each	55.113	55.113	53.841
Lavatory, enameled iron, 20"x18", f.o.b. plant, freight allowed .....	Each	13.497	13.497	12.858
Water closet, vitreous china, close coupled, reverse trap, f.o.b. plant, freight allowed .....	Each	24.682	24.682	23.242
Sink, enameled steel, 32"x21", flat rim, 2-compartment, acid resisting, without drainboard, f.o.b. plant, freight allowed .....	Each	15.687	15.687	16.634

See footnotes at end of table.

Table 26.—Wholesale Prices of Selected Building Materials—Continued

Commodity	Unit	1956		1955
		July	June	July
<b>HEATING EQUIPMENT</b>				
Boiler, heating, steel, oil fired, steam rating 400 sq. ft., less burner, with jacket and standard trim, f.o.b. factory, freight allowed .....	Each	\$190.342	\$190.342	\$183.142
Convactor, nonferrous, free standing, average steam rating 43 sq. ft., E.D.R., f.o.b. factory, freight allowance .....	Sq. ft., incl. enclosure	.451	.451	.433
Furnace, warm air:				
Steel, oil fired, forced air, gun-type burner, average bonnet output 90,000-115,000 BTU per hr., f.o.b. factory, freight allowance .....	Each	242.671	242.671	247.732
Steel, gas fired, standard automatic controls, average input rating 85,000-110,000 BTU per hr., enclosing jacket, f.o.b. factory, freight allowance .....	Each	165.998	165.998	157.008
Furnace, floor, gas fired, floor grill, average input rating 40,000-60,000 BTU per hr., manual controls, f.o.b. factory .....	Each	57.217	57.217	62.070
Oil burner, mechanical forced draft (gun-type) 2-1/2 gal. per hr., thermostat, limit and stack controls, f.o.b. factory .....	Each	100.961	100.961	102.225
Water heater, gas, automatic, 30-gal. storage tank, galvanized steel, 1-year guarantee, f.o.b. factory, freight allowed .....	Each	41.640	40.966	38.830
<b>NONMETALLIC MINERAL PRODUCTS</b>				
Sand, construction, f.o.b. plant .....	Ton	1.225	1.229	1.160
Gravel, for concrete, 1-1/2" maximum, f.o.b. plant .....	Ton	1.510	1.508	1.395
Crushed stone, for concrete, 1-1/2" maximum, f.o.b. plant .....	Ton	1.610	1.610	1.589
Block, concrete, lightweight aggregate, 8"x8"x16", f.o.b. plant .....	Each	.181	.179	.175
Pipe, concrete, culvert, reinforced, 24" diameter, ASTM spec. C76-41 table 1, 3" wall thickness, 3'-8' lengths, delivered .....	Foot	3.981	3.938	3.810
Brick, building, f.o.b. plant .....	Thousand	30.946	30.946	28.952
Brick, face, red, first quality, textured, f.o.b. plant .....	Thousand	39.998	39.998	37.717
Tile, clay, partition, scored, 4"x12"x12", 3-cell, 16 lbs., f.o.b. plant .....	Thousand	134.556	134.556	126.629
Sewer pipe, vitrified clay, 8" diameter, 3' lengths, standard strength, f.o.b. plant .....	Foot	.520	.520	.488
Lath, gypsum, 3/8"x16"x48", f.o.b. plant, freight equalized .....	M sq. ft.	24.990	24.990	24.010
Wallboard, gypsum, 3/8"x48", varying lengths, f.o.b. plant, freight equalized .....	M sq. ft.	32.830	32.830	31.850
Plaster, gypsum, base coat, f.o.b. plant, freight equalized .....	Ton	15.928	15.928	14.948
Shingles, asphalt, strip, 210 lbs., f.o.b. factory, freight allowance .....	Square	5.897	5.595	5.364
Lime, hydrated, building, finishing, f.o.b. plant .....	Ton	20.306	20.306	19.778
Siding shingles, asbestos cement, f.o.b. plant, freight equalized .....	Square	10.996	10.996	10.306

Source: Department of Labor.

<sup>1</sup> Data not available.**HOUSING VACANCY RATES, SECOND QUARTER 1956**

The housing vacancy rate in the second quarter of 1956 remained virtually the same as in the preceding quarter, or 2.6 percent of all dwelling units in the United States, according to the latest survey of the Bureau of the Census. Of the units available for occupancy, 2.1 percent were for rent, and 0.5 percent were for sale.

Vacancy or occupancy class	Percent distribution				
	1956		1955		
	2d qtr.	1st qtr.	4th qtr.	3d qtr.	2d qtr.
Total dwelling units .....	100.0	100.0	100.0	100.0	100.0
Vacant dwelling units:					
Available for occupancy <sup>1</sup> .....	2.6	2.7	2.7	2.3	2.3
For rent <sup>2</sup> .....	2.1	2.2	2.2	1.8	1.8
For sale .....	.5	.5	.5	.5	.5
Rented or sold, awaiting occupancy <sup>1</sup> ..	.5	.4	.4	.5	.5
Held off market .....	2.1	2.2	2.0	1.6	1.5
Dilapidated .....	1.0	1.1	1.2	1.1	1.2
Seasonal dwelling units .....	2.5	2.4	2.4	2.6	2.6
Occupied dwelling units .....	91.3	91.2	91.3	91.9	91.9

Source: Housing and Construction Report, Series H-111, No. 5, Bureau of the Census, U. S. Department of Commerce. Price 10 cents a copy. <sup>1</sup> Nonseasonal, not dilapidated units. <sup>2</sup> Comprises vacant units offered for rent, as well as those being offered for rent or for sale.

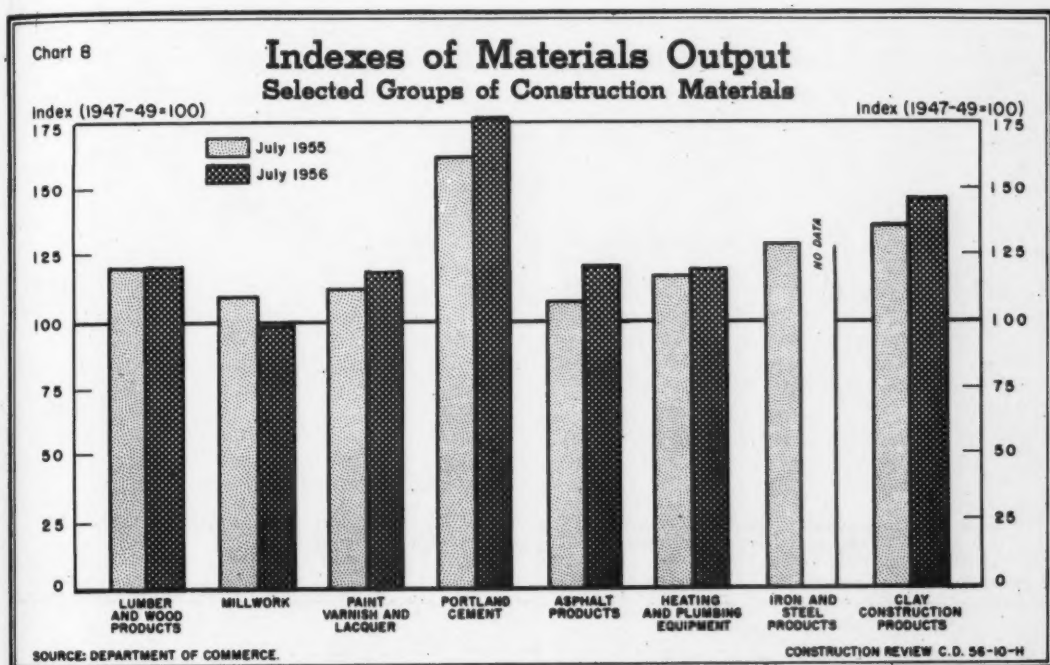


Table 27.--Construction Materials: Indexes of Output

(Monthly average 1947-49 = 100)

(Monthly average 1947-49 = 100)

Materials group	Monthly Indexes												
	1955						1956						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Lumber and wood products...	119.6	146.0	139.7	135.3	124.6	117.6	121.0	119.5	129.0	129.3	138.6	130.0	119.8
Millwork .....	108.8	141.7	143.1	134.3	128.3	103.9	107.7	122.9	128.0	125.5	126.3	118.4	98.2
Paint, varnish, and lacquer .....	111.8	123.4	118.1	107.1	105.9	100.3	112.3	114.4	120.4	117.9	129.3	124.4	117.5
Portland cement .....	163.5	166.7	161.1	167.0	148.9	138.0	128.2	117.1	139.9	156.3	177.1	172.1	176.5
Asphalt products .....	107.0	146.8	126.2	122.4	110.1	71.2	68.5	100.3	130.0	80.8	113.6	119.8	121.1
Heating and plumbing equipment .....	116.9	180.6	183.2	164.0	139.7	107.7	126.8	118.0	133.3	116.6	125.4	123.3	118.8
Iron and steel products .....	127.6	144.1	149.5	145.0	134.9	132.3	136.4	143.4	155.7	152.2	164.2	164.0	(1)
Clay construction products..	135.6	150.1	151.3	148.0	146.0	136.4	136.1	129.2	146.4	137.6	146.5	147.3	145.9
	Quarterly Indexes												
	1955						1956						
	First quarter		Second quarter		Third quarter		Fourth quarter		First quarter		Second quarter		
Gypsum products .....	168.9		173.7		180.3		185.4		187.6		188.6		
Plumbing fixtures .....	133.5		141.3		130.4		142.2		140.6		135.7		

Source: Table compiled by the Department of Commerce from data reported by various Government agencies and by private firms shown in notes to the tables following. <sup>1</sup> Data not yet available.

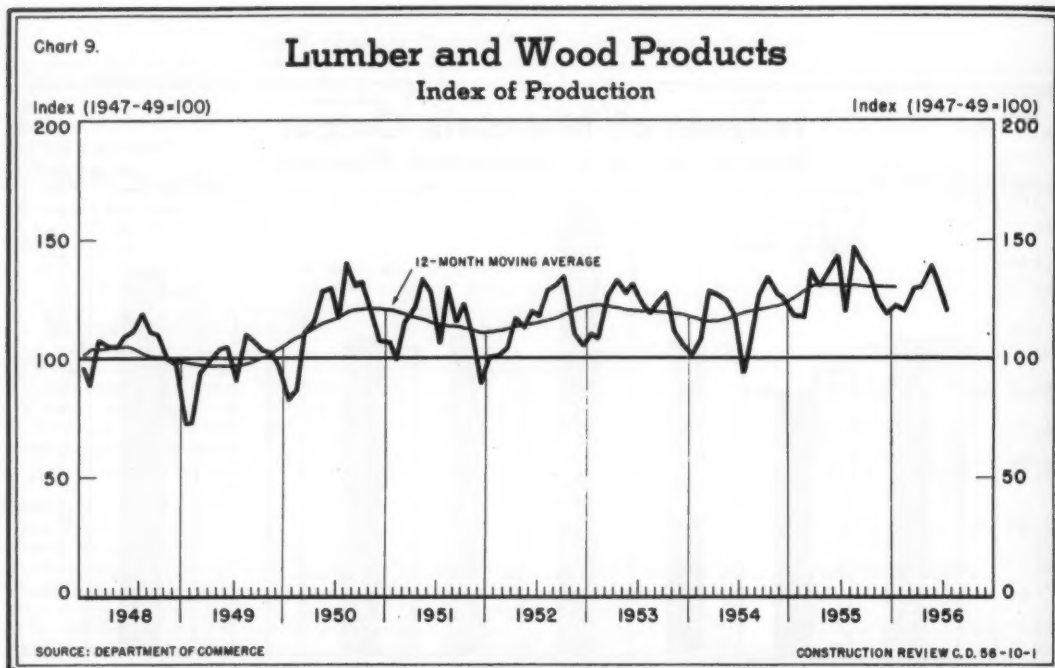


Table 28.--Lumber and Wood Products: Production, Shipments, and Stocks

Period	Softwood lumber (Million board feet)			Hardwood flooring (Thousand board feet)			Douglas fir plywood (Million square feet)	Insulating boards (Tons)	Hardboard (Tons)
	Production	Shipments	Stocks*	Production	Shipments	Stocks*	Production		
1947-49 average .....	28,048	27,440	4,448	812,365	789,437	44,455	1,802	766,269	294,214
Year: 1953 .....	31,072	30,318	5,756	1,004,558	1,010,972	73,449	3,704	950,889	423,418
1954 .....	29,296	29,798	5,275	1,145,118	1,139,091	68,425	3,825	1,013,340	493,258
1955 .....	31,563	31,432	5,429	1,268,104	1,258,914	70,045	4,901	1,119,213	536,845
12 months ending:									
April 1956 .....	31,189	30,983	--	1,261,013	1,228,413	--	5,070	1,146,986	550,602
May 1956 .....	31,183	30,936	--	1,260,358	1,222,733	--	5,093	1,161,030	553,028
June 1956 .....	30,902	30,492	--	1,245,241	1,204,425	--	5,036	1,183,525	554,052
July 1956 .....	30,872	30,338	--	1,233,068	1,190,122	--	5,070	1,191,277	553,960
1955:									
July .....	2,464	2,592	4,869	103,278	104,894	51,788	321	91,602	44,170
August .....	3,038	2,962	4,952	114,156	113,495	52,424	415	102,681	46,482
September .....	2,871	2,756	5,066	109,338	110,585	50,483	423	95,722	44,438
October .....	2,728	2,605	6,665	105,945	104,909	51,644	428	101,344	46,860
November .....	2,442	2,360	5,254	106,217	98,949	58,812	423	93,644	45,836
December .....	2,280	2,106	5,429	97,765	86,532	70,045	414	93,748	42,426
1956:									
January .....	2,305	2,227	5,495	100,999	94,957	76,187	448	91,924	49,731
February .....	2,289	2,288	5,486	97,393	93,162	81,877	443	93,920	44,164
March .....	2,483	2,593	5,580	102,516	99,491	88,249	470	105,377	46,777
April .....	2,541	2,620	5,311	97,788	94,970	83,056	447	103,267	47,380
May .....	2,796	2,780	5,327	108,891	104,107	87,890	432	106,204	49,185
June .....	2,665	2,603	5,392	100,955	98,374	88,216	372	104,092	46,603
July .....	2,434	2,438	5,388	91,105	90,591	87,593	355	99,354	44,078
Percent change									
July, 1955-56 .....	-1	-6	+11	-12	-14	+69	+11	+8	(1)
First 7 mos., 1955-56 .....	-4	-6	--	-5	-9	--	+5	+11	+5

Source: Table compiled by Department of Commerce (BDSC) from data reported by the National Lumber Manufacturers Association, the Douglas Fir Plywood Association, and the Bureau of the Census.

\* As of end of period.

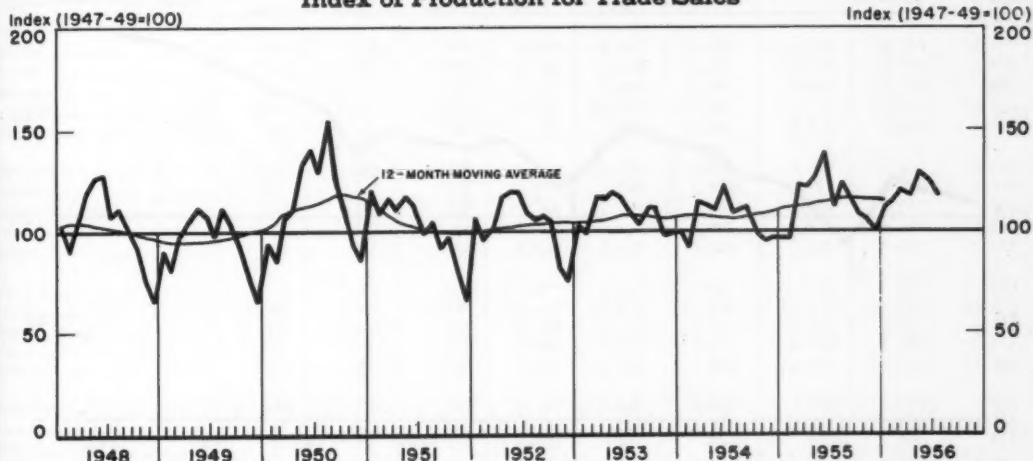
<sup>1</sup> Change of less than one-half

of 1 percent.



Chart 10.

# Paint, Varnish, and Lacquer Index of Production for Trade Sales



SOURCE: DEPARTMENT OF COMMERCE.

CONSTRUCTION REVIEW C.D. 56-10-J

Table 29.—Millwork Products, and Paint, Varnish, and Lacquer: Production

Period	Production (Thousands of units)					Production for trade sales (Thousands of gallons)
	Douglas fir doors (panel type)	Ponderosa pine doors	Hardwood doors	Sash	Exterior frames	Paint, varnish, & lacquer
1947-49 average .....	5,658	3,780	3,172	11,246	4,152	266,701
Year: 1953 .....	4,070	2,487	4,783	11,419	5,072	288,094
1954 .....	3,522	2,285	5,940	11,054	5,791	282,979
1955 .....	(1)	2,253	6,786	12,733	7,259	304,476
12 months ending:						
April 1956 .....	(1)	2,155	6,640	11,765	6,807	310,447
May 1956 .....	(1)	2,149	6,658	11,628	6,736	311,055
June 1956 .....	(1)	2,131	6,613	11,368	6,585	307,861
July 1956 .....	(1)	2,125	6,568	11,309	6,513	309,121
1955: July .....	184	133	490	817	537	24,845
August .....	229	203	613	1,163	704	27,423
September .....	239	202	621	1,137	713	26,255
October .....	(1)	206	528	1,174	681	23,797
November .....	(1)	193	517	1,145	591	23,529
December .....	(1)	149	454	897	414	22,282
1956: January .....	(1)	166	480	873	442	24,954
February .....	(1)	189	561	896	463	25,423
March .....	(1)	182	625	771	460	26,768
April .....	(1)	168	618	738	476	26,197
May .....	(1)	176	572	913	535	28,738
June .....	(1)	164	534	844	569	27,650
July .....	(1)	127	445	758	465	26,105
Percent change						
July, 1955-56 .....	--	- 5	- 9	- 7	-13	+ 5
First 7 mos., 1955-56 .....	--	-10	- 5	-20	-18	+ 3

Source: Table compiled by Department of Commerce (BDSD) from data reported by the Fir Door Institute, the National Wood Work Manufacturers Association (whose data on ponderosa pine and hardwood doors, sash and exterior frames are only from member firms, and are not adjusted to represent full coverage), and the Bureau of the Census. <sup>1</sup>Not available.

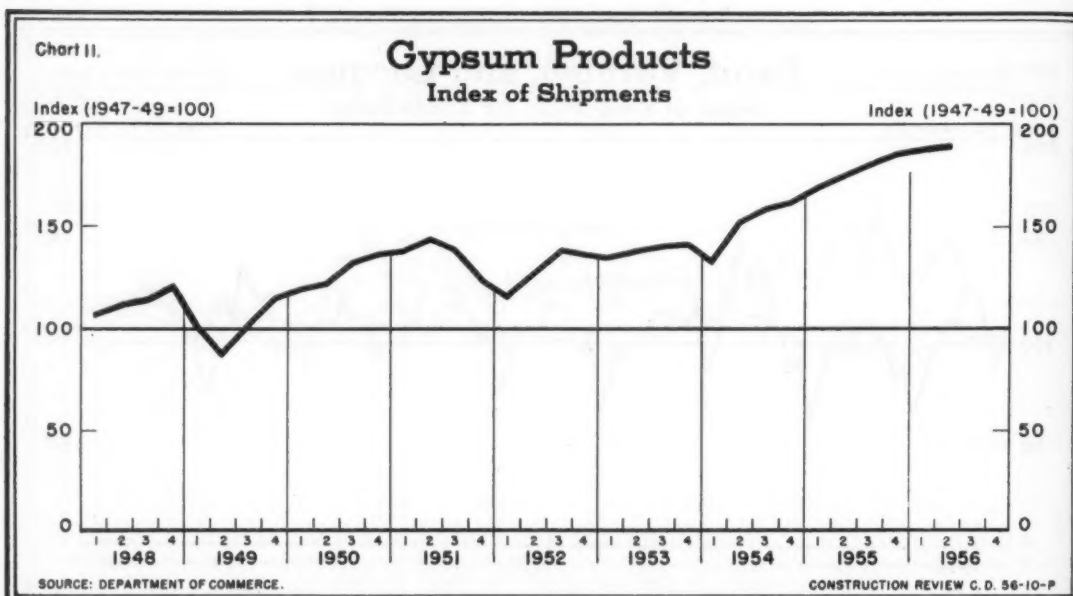


Table 30.—Portland Cement, and Asphalt and Gypsum Products: Production, Shipments, and Stocks

Period	Pro- duction	Ship- ments	Stocks*	Shipments (Thousands of squares)				Shipments (Million square feet)	
	(Thousands of barrels)			Asphalt prepared roofing	Asphalt siding	Asphalt insulated brick siding	Asphalt and tar saturated felts	Gypsum board <sup>1</sup>	Gypsum lath <sup>1</sup>
	Portland cement								
1947-49 average.....	200,607	199,306	11,922	61,252	3,365	2,811	17,087	2,478	2,075
Year: 1953.....	264,022	260,889	19,231	56,703	1,557	2,794	25,778	3,757	2,435
1954.....	271,277	274,096	16,731	58,648	1,447	2,297	28,531	4,217	2,484
1955.....	296,829	296,275	17,536	62,930	1,293	2,193	34,609	4,911	2,926
12 months ending:									
April 1956.....	302,375	299,813	--	62,764	1,285	2,203	32,690	} 5,165	3,034
May 1956.....	304,950	302,373	--	62,291	1,272	2,172	32,699		
June 1956.....	306,959	303,063	--	61,098	1,258	2,142	31,882		
July 1956.....	309,125	305,194	--	61,673	1,268	2,148	32,414		
1955: July.....	27,332	29,467	16,727	5,225	91	200	2,312	} 1,232	771
August.....	27,861	31,883	12,731	7,183	124	253	3,238		
September.....	26,958	29,867	9,779	6,242	139	255	2,496		
October.....	27,924	28,950	8,753	5,948	150	229	2,624	} 1,298	748
November.....	24,894	21,985	11,663	4,617	128	169	3,483		
December.....	23,075	17,203	17,536	2,707	74	93	2,704		
1956: January.....	21,440	13,500	25,456	3,188	83	94	1,798	} 1,339	719
February.....	19,578	16,093	28,939	4,624	112	116	2,784		
March.....	23,386	22,471	29,854	6,157	120	183	3,294		
April.....	26,134	27,261	28,675	3,951	64	151	1,742	} 1,296	796
May.....	29,606	32,087	26,198	5,499	78	202	2,577		
June.....	28,771	32,296	22,679	5,757	95	197	2,830		
July.....	29,498	31,598	20,585	5,800	101	206	2,844		
Percent change									
July 1955-56.....	+8	+7	+23	+11	+11	+3	+23	--	--
First 7 mos., 1955-56.....	+7	+6	--	-3	-4	-4	-11	--	--

Source: Table compiled by Department of Commerce (BDISA) from data reported by the Department of Interior (Bureau of Mines), and the Bureau of the Census. \* As of end of period. <sup>1</sup> Data reported on quarterly basis.

Table 31.--Portland Cement: Destination of Shipments, by State

(Thousands of barrels)

State	1956			Calendar year			12 months ending--		
	Apr.	May	June	1953	1954	1955	Apr. 1956	May 1956	June 1956
Alabama .....	486	455	439	4,260	3,943	3,949	4,249	4,385	4,495
Arizona .....	209	237	256	2,433	2,215	2,337	2,283	2,294	2,354
Arkansas .....	164	201	196	1,762	1,894	2,519	2,005	1,933	1,876
California .....	2,827	3,194	3,118	27,737	28,528	31,553	32,761	33,118	33,263
Colorado .....	360	391	394	2,941	3,285	3,486	3,808	3,867	3,890
Connecticut .....	363	479	490	3,194	3,258	3,380	3,437	3,530	3,646
Delaware .....	113	105	116	902	910	1,097	1,161	1,169	1,146
District of Columbia .....	112	134	159	1,249	1,324	1,395	1,346	1,345	1,368
Florida .....	715	785	710	7,487	8,354	8,997	8,378	8,404	8,391
Georgia .....	424	456	454	4,644	4,441	5,198	5,633	5,632	5,612
Idaho .....	110	122	128	986	1,215	923	935	950	969
Illinois .....	1,587	1,761	1,848	13,439	14,973	14,670	15,391	15,626	15,871
Indiana .....	849	1,190	1,145	6,568	6,724	8,073	8,466	8,926	9,177
Iowa .....	753	932	921	4,941	5,863	5,883	6,314	6,487	6,647
Kansas .....	782	802	764	5,801	6,576	7,248	7,350	7,344	7,283
Kentucky .....	330	359	407	3,354	3,026	3,636	3,718	3,744	3,804
Louisiana .....	639	811	769	5,728	6,292	7,347	7,851	8,073	8,156
Maine .....	55	120	157	894	857	961	856	866	919
Maryland .....	600	649	644	4,676	4,447	4,882	5,182	5,322	5,505
Massachusetts .....	507	736	654	4,351	4,180	5,239	5,262	5,367	5,441
Michigan .....	1,257	1,621	1,965	12,716	13,076	13,991	14,232	14,332	14,644
Minnesota .....	534	659	645	4,968	5,500	5,838	5,918	5,816	5,724
Mississippi .....	168	194	195	1,696	1,732	1,972	1,995	2,013	2,000
Missouri .....	809	782	810	6,796	7,556	7,824	7,849	7,957	7,902
Montana .....	107	156	168	949	1,019	951	1,015	1,075	1,118
Nebraska .....	330	426	421	3,384	3,724	3,485	3,526	3,472	3,390
Nevada .....	68	62	57	618	842	737	719	716	700
New Hampshire .....	77	163	154	549	827	1,147	1,117	1,150	1,125
New Jersey .....	895	1,021	951	8,581	9,164	9,337	9,317	9,347	9,278
New Mexico .....	199	212	196	1,860	2,111	1,996	1,956	1,984	1,986
New York .....	1,661	2,209	2,318	19,134	20,290	19,399	19,221	19,289	19,234
North Carolina .....	382	409	413	3,715	4,009	4,414	4,375	4,293	4,254
North Dakota .....	106	162	150	1,148	1,161	1,150	1,143	1,195	1,199
Ohio .....	1,413	1,589	1,778	14,286	16,003	17,320	17,618	17,284	16,793
Oklahoma .....	452	452	398	4,158	4,364	4,785	4,683	4,716	4,691
Oregon .....	246	264	249	2,445	2,081	2,398	2,418	2,443	2,444
Pennsylvania .....	1,316	1,574	1,724	15,234	15,108	16,077	15,732	15,633	15,486
Rhode Island .....	96	108	88	857	685	822	827	847	837
South Carolina .....	205	237	211	2,217	1,993	2,461	2,532	2,514	2,500
South Dakota .....	85	134	188	1,246	1,116	1,221	1,206	1,233	1,296
Tennessee .....	446	474	410	4,856	4,683	5,088	5,275	5,316	5,262
Texas .....	1,905	1,992	1,839	16,158	19,081	20,781	20,660	20,907	20,913
Utah .....	194	219	209	1,343	1,508	1,835	1,951	1,973	1,985
Vermont .....	26	41	47	300	242	294	297	298	300
Virginia .....	495	566	570	4,701	4,474	4,801	4,957	5,063	5,158
Washington .....	455	519	459	5,413	5,684	5,656	5,202	5,160	5,016
West Virginia .....	151	202	211	1,921	2,379	2,053	2,071	2,105	2,118
Wisconsin .....	558	783	805	6,127	5,840	5,977	6,191	6,302	6,375
Wyoming .....	62	75	75	538	585	578	622	634	644

Source: Table compiled by Department of Commerce from data reported by Department of Interior (Bureau of Mines).

## CONSTRUCTION REVIEW

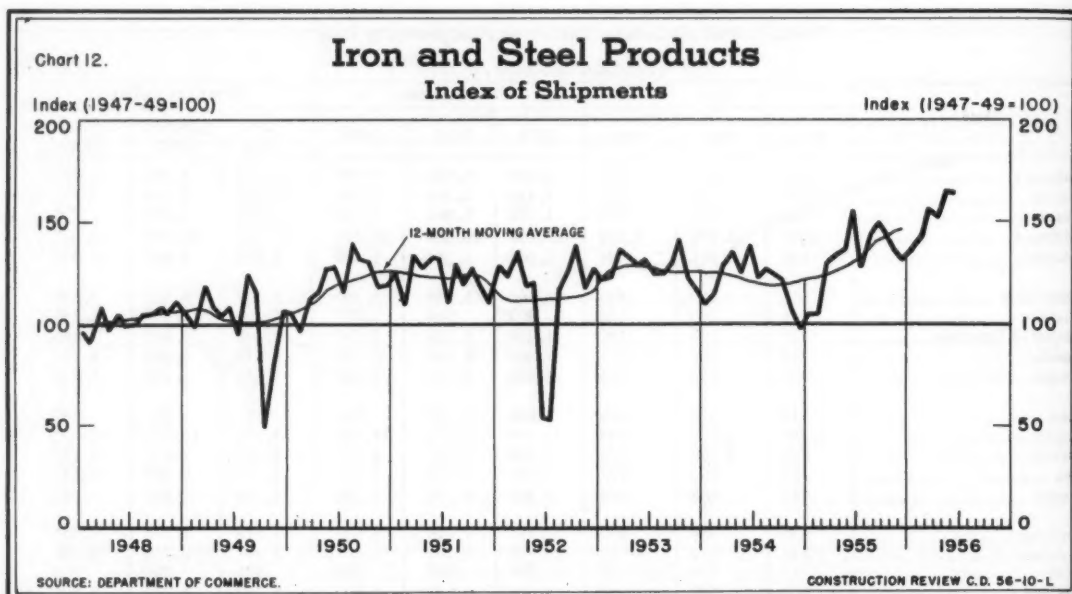


Table 32.--Iron and Steel Products: Shipments, Bookings, and Backlog

(Thousands of tons)

Period	Shipments									Shipments	Bookings	Backlog <sup>1</sup>
	Line pipe	Concrete reinforcing bars	Galvanized sheets	Nails	Piling	Rails	Cast-iron pipe		Rigid steel conduit			
							Pressure	Soil				
1947-49 average .....	1,975	1,523	1,669	797	309	2,167	1,075	604	226	2,248	2,105	--
Year: 1953 .....	3,507	1,849	2,291	529	343	1,954	1,286	677	221	3,117	2,787	1,010
1954 .....	2,595	1,751	2,363	567	388	1,196	1,376	744	227	3,136	2,510	743
1955 .....	3,083	2,163	2,865	651	391	1,233	1,682	869	280	2,981	3,693	1,029
12 months ending:												
April 1956 .....	3,487	2,375	3,077	633	421	1,298	1,758	849	307	3,205	4,144	--
May 1956 .....	3,589	2,390	3,114	626	418	1,291	1,761	853	321	3,288	4,199	--
June 1956 .....	3,573	2,456	3,146	624	420	1,270	1,784	843	343	3,291	4,218	--
July 1956 .....	(2)	(2)	(2)	(2)	(2)	(2)	1,800	842	344	3,237	4,137	--
1955: July .....	296	177	205	49	32	104	129	67	35	219	369	1,009
August .....	315	197	242	56	32	88	156	85	21	268	312	1,060
September .....	295	186	269	58	33	95	165	82	25	289	339	1,049
October .....	265	202	260	53	41	86	161	76	26	284	309	1,068
November .....	260	194	256	40	34	74	149	67	24	259	345	1,088
December .....	278	194	262	35	36	98	134	46	24	248	368	1,029
1956: January .....	274	182	269	50	30	131	131	59	22	251	405	1,176
February .....	288	174	273	49	32	114	133	64	27	285	331	1,199
March .....	299	217	291	56	39	131	132	74	28	307	366	1,187
April .....	304	228	267	50	33	129	152	70	31	290	379	1,107
May .....	367	230	273	56	37	114	172	79	35	306	358	1,224
June .....	332	275	279	72	41	106	170	74	45	285	337	1,193
July .....	(2)	(2)	(2)	(2)	(2)	(2)	145	66	36	165	288	1,227
Percent change												
July, 1955-56 .....	--	--	--	--	--	--	+12	-1	+3	-25	-22	+22
First 7 mos., 1955-56 .....	--	--	--	--	--	--	+13	-5	+40	+16	+22	--

Source: Table compiled by the Department of Commerce (BDSA) from data reported by the American Iron and Steel Institute, the National Electric Manufacturers Association, the American Institute of Steel Construction, and the Bureau of the Census. <sup>1</sup> Scheduled for fabrication in the next 4 months. <sup>2</sup> Not yet available.



# CONSTRUCTION REVIEW

43

Table 33.—Clay Construction Products: Production and Shipments

Period	Brick, common and face (Million brick)		Structural clay tile (Thousand tons)		Vitrified clay sewer pipe (Thousand tons)		Hollow facing tile (Million brick equivalent)		Glazed & unglazed floor & wall tile (Thousand square feet)	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
1947-49 average .....	5,504	5,324	1,286	1,231	1,451	1,375	357	341	104,800	101,088
Year: 1953 .....	5,875	5,771	990	922	1,655	1,563	456	444	137,429	134,375
1954 .....	6,153	6,119	953	895	1,702	1,636	457	444	141,066	139,515
1955 .....	7,148	7,010	839	835	1,925	1,880	493	482	187,991	187,828
12 months ending:										
April 1956 .....	7,440	7,076	837	791	1,955	1,937	515	498	199,871	195,795
May 1956 .....	7,498	7,085	834	780	1,925	1,896	520	499	203,475	197,369
June 1956 .....	7,490	7,033	817	762	1,910	1,882	521	497	205,632	196,525
July 1956 .....	7,515	7,025	809	749	1,926	1,889	528	501	207,646	197,402
1955: July .....	623	627	73	70	152	171	41	40	14,414	15,036
August .....	677	680	73	81	173	193	46	46	16,504	16,969
September .....	676	678	69	74	183	188	41	40	16,967	17,215
October .....	657	638	72	74	172	172	38	37	17,467	16,917
November .....	633	581	70	64	174	157	38	37	17,668	16,543
December .....	567	480	69	60	163	118	43	40	16,986	16,308
1956: January .....	565	435	69	54	155	121	43	42	17,527	15,972
February .....	536	455	63	51	157	155	43	39	15,781	15,481
March .....	611	541	68	55	173	159	48	45	18,173	16,638
April .....	627	625	66	59	117	128	49	45	17,371	16,289
May .....	672	661	65	61	127	137	47	43	18,681	17,065
June .....	646	632	60	59	164	183	44	43	18,093	16,092
July .....	648	619	65	57	168	178	48	44	16,428	15,913
Percent change										
July, 1955-56 .....	+ 4	- 1	-11	-19	+11	+ 4	+17	+10	+14	+ 6
First 7 mos., 1955-56 .....	+ 9	(1)	- 6	-18	(1)	+ 1	+12	+ 7	+19	+ 9

Source: Table compiled by Department of Commerce (BDSA) from data reported by the Bureau of the Census. <sup>1</sup> Change of less than one-half of 1 percent.

Table 34.—Clay Construction Products: Production and Shipments, by Census Region <sup>1</sup>

Census region	PRODUCTION				SHIPMENTS			
	July 1956		First 7 months 1956		July 1956		First 7 months 1956	
	Quantity	Percent change from July 1955	Quantity	Percent change, 1955-56	Quantity	Percent change from July 1955	Quantity	Percent change, 1955-56
Brick, common and face (thousands)								
U. S. TOTAL .....	648,127	+ 4	4,306,154	+ 9	618,630	- 1	3,968,553	(2)
New England .....	14,229	+10	85,580	+22	13,057	+16	77,435	+22
Middle Atlantic .....	98,975	+ 3	669,660	+10	108,740	(2)	619,076	- 1
East North Central .....	149,994	+ 8	972,276	+ 8	146,149	+ 5	911,352	+ 3
West North Central .....	40,323	+15	233,120	+13	34,852	+ 2	202,528	+ 4
South Atlantic .....	153,265	+ 2	1,054,583	+ 8	140,348	- 8	973,154	- 4
East South Central .....	59,628	+ 5	417,498	+13	57,880	+ 1	386,067	+ 4
West South Central .....	68,208	- 9	515,813	+ 8	62,316	- 8	432,938	- 5
Mountain .....	22,329	+ 7	164,846	+20	21,430	+ 9	156,416	+18
Pacific .....	41,176	+10	192,778	- 1	33,858	- 6	209,587	- 1
Structural clay tile (tons)								
U. S. TOTAL .....	65,113	-10	456,788	- 6	56,753	-19	396,369	-18
Middle Atlantic .....	6,045	-20	45,602	- 4	6,108	- 6	37,032	-25
East North Central .....	6,243	-51	41,967	-47	6,128	-53	38,828	-53
West North Central .....	9,788	-7	69,448	+ 5	9,374	+ 2	54,663	-13
South Atlantic .....	14,678	+21	87,260	- 1	12,490	- 7	90,013	- 5
East South Central .....	3,934	-19	27,379	-33	3,644	-23	27,272	-36
West South Central .....	21,817	- 2	169,133	+11	16,702	-21	133,127	- 4
Mountain & Pacific .....	2,518	+10	15,999	+26	2,307	+30	15,434	+28
Vitrified clay sewer pipe (tons)								
U. S. TOTAL .....	168,228	+11	1,062,273	(2)	178,007	+ 4	1,061,991	+ 1
Middle Atlantic .....	18,191	+10	105,291	- 7	20,009	+11	100,142	- 5
East North Central .....	66,180	+ 2	395,462	- 7	73,559	- 1	403,183	- 6
West North Central .....	16,638	+ 7	115,213	+ 1	15,967	-10	108,503	- 5
South Atlantic .....	18,914	+45	101,269	+19	20,165	+53	112,899	+31
E. & W. South Central .....	22,669	+29	166,319	+17	22,863	+10	159,071	+17
Mountain .....	4,660	+28	28,518	+19	3,843	+ 7	26,791	+18
Pacific .....	20,976	+ 4	150,201	- 3	21,601	- 7	151,402	- 1

Source: Table compiled by Department of Commerce (BDSA) from data reported by the Bureau of the Census. <sup>1</sup> Composition of regions, and nonfarm population distribution by region, are shown below table 2. <sup>2</sup> Change of less than one-half of 1 percent.

Table 35.--Heating and Plumbing Equipment: Shipments and Stocks

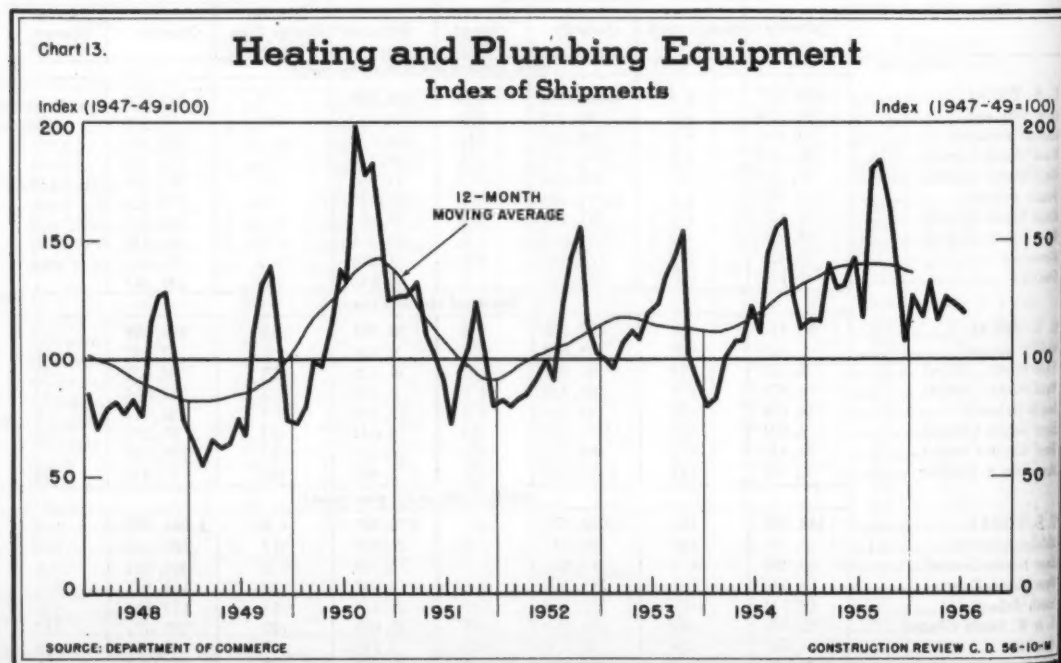
Period	Gas water heaters (Thousands of units)		C. I. convectors and radiators (Thousand square feet)		Warm air furnaces (Thousands of units)		Floor and wall furnaces (Thousands of units)		Residential oil burners <sup>1</sup> (Thousands of units)
	Shipments	Stocks*	Shipments	Stocks*	Shipments	Stocks*	Shipments	Stocks*	Shipments
1947-49 average .....	1,818	67	50,980	4,377	794	69	552	44	541
Year: 1953 .....	2,274	128	31,667	4,650	997	148	552	108	541
1954 .....	2,236	103	28,386	5,434	1,132	130	550	74	494
1955 .....	2,598	108	28,512	4,834	1,348	191	558	70	537
12 months ending:									
April 1956 .....	2,657	--	28,569	--	1,340	--	528	--	500
May 1956 .....	2,671	--	28,214	--	1,334	--	523	--	492
June 1956 .....	2,693	--	27,624	--	1,321	--	521	--	490
July 1956 .....	(2)	--	(2)	--	1,325	--	522	--	482
1955: July .....	207	91	1,865	7,520	108	194	38	87	44
August .....	260	69	3,615	6,378	164	187	57	85	60
September .....	224	93	3,326	5,845	164	187	65	71	68
October .....	219	91	3,115	5,234	150	172	72	61	62
November .....	185	102	2,779	4,666	121	177	54	61	39
December .....	175	108	1,773	4,834	80	191	38	70	27
1956: January .....	224	109	2,018	4,866	87	212	33	86	32
February .....	246	104	2,236	5,013	79	226	29	87	29
March .....	255	96	1,802	5,814	85	255	34	92	27
April .....	230	102	1,900	6,082	85	263	32	91	31
May .....	231	107	1,577	6,912	94	275	34	93	32
June .....	237	114	1,618	7,519	104	267	35	86	39
July .....	(2)	(2)	(2)	(2)	112	247	39	78	36
Percent change									
July, 1955-56 .....	--	--	--	--	+4	+27	+3	-10	-18
First 7 mos., 1955-56 .....	--	--	--	--	-4	--	-13	--	-19

Source: Table compiled by Department of Commerce (BDSA) from data reported by the Bureau of the Census.

\* As of end of

period. <sup>1</sup> Sold separately.

<sup>2</sup> Not yet available.



# Part VII--Employment

43

Table 36.--Contract Construction: Employment by Type of Contractor

Period	All contractors	Building contractors							Nonbuilding contractors		
		All building contractors	General contractors	Special trades contractors					All non-building	Highway and street	Other non-buildings
				All special trades	Plumbing and heating	Painting and decorating	Electrical work	Other trades			
NUMBER OF EMPLOYEES (in thousands)											
Year: 1948.....	2,169.0	1,753.0	807.0	946.0	238.2	124.9	123.2	459.8	416.0	172.1	243.8
1949.....	2,165.0	1,736.0	779.0	957.0	241.7	123.4	122.1	469.5	428.0	178.1	250.3
1950.....	2,333.0	1,885.0	844.0	1,041.0	263.1	130.8	123.4	524.0	448.0	183.0	265.2
1951.....	2,603.0	2,109.0	957.6	1,151.7	286.9	155.7	140.5	568.7	493.0	201.3	291.9
1952.....	2,634.0	2,119.0	948.3	1,170.8	287.7	156.5	155.7	570.9	514.0	209.4	305.0
1953.....	2,622.0	2,109.0	934.0	1,175.1	288.9	148.1	159.7	578.4	513.0	214.9	297.8
1954.....	2,593.0	2,090.0	885.7	1,204.0	295.7	143.8	164.4	600.1	503.0	217.4	285.6
1955.....	2,780.0	2,279.0	937.7	1,341.6	318.3	165.6	169.1	688.6	501.0	222.9	278.2
1955: July.....	3,032.0	2,454.0	1,027.5	1,426.3	328.4	190.4	171.6	735.9	578.0	272.3	305.8
Aug.....	3,088.0	2,502.0	1,047.4	1,454.7	338.9	192.9	172.9	750.0	586.0	277.9	308.1
Sept.....	3,094.0	2,501.0	1,031.7	1,469.2	344.1	188.8	176.1	760.2	593.0	279.5	313.1
Oct.....	3,031.0	2,458.0	1,009.3	1,448.3	340.7	183.8	177.8	746.0	573.0	266.2	306.9
Nov.....	2,921.0	2,398.0	988.4	1,409.8	331.1	176.9	177.0	724.8	523.0	235.7	287.5
Dec.....	2,756.0	2,306.0	941.6	1,364.1	322.0	161.1	175.0	706.0	450.0	187.3	262.4
1956: Jan.....	2,588.0	2,185.0	880.0	1,304.8	311.9	142.5	172.2	678.2	403.0	156.5	246.3
Feb.....	2,588.0	2,189.0	878.4	1,310.7	310.2	144.3	170.6	685.6	399.0	153.2	245.6
Mar.....	2,669.0	2,244.0	914.2	1,330.1	313.5	147.3	170.7	698.6	425.0	168.0	256.8
Apr.....	2,853.0	2,376.0	981.8	1,394.4	317.3	166.2	173.7	737.2	477.0	204.5	272.4
May.....	3,040.0	2,501.0	1,038.4	1,462.4	327.4	185.6	179.1	770.3	539.0	242.1	296.7
June.....	3,257.0	2,666.0	1,126.4	1,539.6	340.3	205.0	187.6	806.7	591.0	271.9	319.2
July.....	3,289.0	2,688.0	1,138.7	1,549.3	345.0	209.7	193.6	801.0	601.0	275.6	325.1
Aug.....	*3,345.0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Percent change											
June-July 1956.....	+1.0	+0.8	+1.1	+0.6	+1.4	+2.3	+3.2	-0.7	+1.7	+1.4	+1.8
July, 1955-56.....	+8.5	+9.5	+10.8	+8.6	+5.1	+10.1	+12.8	+8.8	+4.0	+1.2	+6.3

Source: Department of Labor.

\* Percent change: July-Aug. 1956-- +1.7; Aug. 1955-56-- +8.3.

<sup>1</sup> Not yet available.

Table 37.--Contract Construction: Number of Employees and Indexes of Employment (Seasonally Adjusted)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
NUMBER OF EMPLOYEES (in thousands, seasonally adjusted)													
1948.....	2,120	2,015	2,065	2,105	2,136	2,184	2,199	2,212	2,220	2,229	2,249	2,251	2,169
1949.....	2,222	2,171	2,146	2,128	2,124	2,130	2,157	2,176	2,197	2,192	2,190	2,141	2,165
1950.....	2,119	2,101	2,105	2,173	2,236	2,337	2,405	2,451	2,473	2,502	2,517	2,471	2,333
1951.....	2,526	2,521	2,569	2,593	2,596	2,613	2,633	2,641	2,630	2,653	2,606	2,620	2,603
1952.....	2,599	2,624	2,588	2,586	2,597	2,645	2,658	2,672	2,682	2,648	2,650	2,632	2,634
1953.....	2,647	2,669	2,653	2,638	2,613	2,598	2,588	2,596	2,612	2,632	2,623	2,626	2,622
1954.....	2,533	2,583	2,600	2,614	2,603	2,599	2,591	2,594	2,586	2,584	2,618	2,615	2,593
1955.....	2,624	2,618	2,703	2,752	2,804	2,815	2,834	2,833	2,852	2,833	2,822	2,827	2,780
1956.....	2,876	2,924	2,966	3,003	3,055	3,132	3,074	3,069					
INDEXES (1947-49=100) OF EMPLOYMENT (seasonally adjusted) <sup>1</sup>													
1948.....	100.7	95.7	98.1	100.0	101.5	103.8	104.5	105.1	105.5	105.9	106.8	106.9	103.0
1949.....	105.6	103.1	101.9	101.1	100.9	101.2	102.5	103.4	104.4	104.1	104.0	101.7	102.9
1950.....	100.7	99.8	100.0	103.2	106.2	111.0	114.3	116.4	117.5	118.9	119.6	117.4	110.8
1951.....	120.0	119.8	122.0	123.2	123.3	124.1	125.1	125.5	124.9	126.0	123.8	124.5	123.7
1952.....	123.5	124.7	122.9	122.9	123.4	125.7	126.3	126.9	127.4	125.8	125.9	125.0	125.1
1953.....	125.7	126.8	126.0	125.3	124.1	123.4	122.9	123.3	124.1	125.0	124.6	124.8	124.6
1954.....	120.3	122.7	123.5	124.2	123.7	123.5	123.1	123.2	122.9	122.8	124.4	124.2	123.2
1955.....	124.7	124.4	128.4	130.7	133.2	133.7	134.6	134.6	135.5	134.6	134.1	134.3	132.1
1956.....	136.6	138.9	140.9	142.7	145.1	148.8	146.0	145.8					

Source: Department of Labor.

<sup>1</sup> Indexes for months before January 1953 are based on seasonally adjusted employment data derived by the Federal Reserve Board.

## CONSTRUCTION REVIEW

Table 38.—Contract Construction: Employment, by State

State	Number of employees (in thousands)											Percent change, July 1955-56
	1955	1956							1953	1954	1955	
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	July	July	July	
Alabama.....	33.2	32.0	32.5	32.8	34.4	35.3	36.7	36.8	35.7	32.6	35.4	+ 4
Arizona.....	19.1	18.2	17.7	17.7	17.9	18.3	19.0	19.1	16.7	16.9	19.1	0
Arkansas.....	15.3	14.5	12.4	12.6	12.7	13.3	13.9	14.9	20.3	16.3	17.0	-12
California.....	258.0	257.7	273.0	281.5	288.3	296.8	305.6	300.8	253.3	255.6	283.0	+ 6
Colorado.....	28.0	26.9	25.5	26.2	28.9	29.8	32.3	31.0	28.6	23.6	30.8	+ 1
Connecticut <sup>1</sup> .....	46.6	41.7	40.3	40.8	42.5	46.6	48.7	51.0	43.5	44.8	49.0	+ 4
Delaware <sup>2</sup> .....	--	--	--	--	--	--	--	--	--	--	--	--
District of Columbia..	18.7	18.1	18.2	18.4	18.7	19.3	19.4	19.3	19.5	17.5	18.0	+ 7
Florida.....	92.1	88.3	87.3	86.7	86.3	89.3	91.3	95.0	79.5	81.7	94.2	+ 1
Georgia.....	49.5	49.3	50.6	51.4	53.8	55.7	58.9	58.5	54.7	46.0	53.8	+ 9
Idaho.....	7.9	7.2	6.7	7.5	8.5	9.9	11.1	11.2	10.3	10.4	10.1	+11
Illinois.....	167.4	161.5	157.3	165.1	177.8	187.0	199.6	204.1	180.7	179.0	183.7	+11
Indiana.....	64.8	62.6	61.2	62.5	69.4	74.8	80.5	78.3	68.2	62.7	74.2	+ 6
Iowa.....	27.0	25.9	25.1	26.4	31.9	34.2	37.5	39.1	38.3	41.1	36.9	+ 6
Kansas <sup>3</sup> .....	36.4	33.9	32.8	37.2	39.8	42.3	43.8	43.8	35.2	40.1	43.4	+ 1
Kentucky <sup>2</sup> .....	--	--	--	--	--	--	--	--	--	--	--	--
Louisiana.....	56.1	55.9	54.8	56.1	57.6	56.9	56.6	57.1	60.9	55.9	51.7	+10
Maine.....	10.8	9.6	9.0	8.8	9.7	13.2	15.7	16.6	13.8	16.4	16.0	+ 4
Maryland.....	67.7	64.0	63.5	65.0	69.7	70.7	72.0	70.8	63.1	60.2	69.4	+ 2
Massachusetts.....	80.4	71.6	71.0	73.2	80.6	90.8	97.3	99.2	79.3	75.8	86.7	+14
Michigan.....	111.9	105.3	103.9	102.0	107.2	112.2	119.5	123.1	114.6	128.1	115.7	+ 6
Minnesota.....	51.1	46.3	43.6	42.5	47.0	56.5	63.3	63.7	56.3	62.8	65.5	- 3
Mississippi.....	16.9	14.8	12.8	13.6	14.4	15.5	16.1	16.9	20.6	17.1	18.0	- 6
Missouri.....	68.9	63.9	61.6	67.7	69.2	71.0	73.7	74.3	53.4	72.9	85.9	-14
Montana.....	9.0	8.2	7.5	8.0	10.3	12.4	13.4	13.5	11.1	13.2	13.8	- 2
Nebraska.....	21.8	21.2	20.0	21.5	24.3	26.2	28.1	28.2	23.7	24.6	28.1	(4)
Nevada <sup>3</sup> .....	8.4	7.6	7.3	7.8	7.6	8.4	8.5	8.8	8.8	9.9	10.0	-15
New Hampshire.....	8.7	7.8	7.0	7.1	8.2	10.5	11.2	11.2	7.7	9.9	10.7	+ 5
New Jersey.....	107.4	94.7	97.0	100.1	109.4	111.2	121.7	123.1	98.6	100.1	110.4	+12
New Mexico.....	14.3	13.5	13.6	13.8	14.1	13.9	14.9	14.8	15.5	14.2	16.0	- 8
New York.....	235.1	213.3	209.6	211.5	230.6	248.3	258.7	263.5	225.6	251.4	250.9	+ 5
North Carolina.....	49.2	47.2	46.8	47.7	48.6	50.3	52.3	52.7	56.4	51.2	53.8	- 2
North Dakota.....	5.9	5.1	4.9	4.9	7.1	9.8	11.5	12.3	11.9	15.5	10.7	+15
Ohio.....	156.5	148.0	144.0	147.5	157.2	152.3	172.4	174.4	163.5	183.7	177.3	- 2
Oklahoma.....	29.7	29.1	28.7	30.3	30.9	31.9	32.2	33.5	33.8	33.6	34.8	- 4
Oregon.....	21.8	19.7	19.4	20.7	22.6	24.8	26.6	27.9	28.2	25.5	27.5	+ 1
Pennsylvania.....	177.6	157.2	155.8	163.4	178.8	183.9	199.5	199.3	193.7	190.4	203.4	- 2
Rhode Island.....	16.2	14.3	14.8	15.2	17.3	18.0	19.1	19.1	15.4	15.6	17.9	+ 7
South Carolina.....	27.3	26.1	26.9	26.4	27.1	26.9	28.0	27.5	51.9	38.9	32.2	-15
South Dakota.....	5.8	4.9	4.6	4.6	6.8	8.9	9.6	9.7	11.1	11.8	10.3	- 6
Tennessee.....	43.5	41.5	40.7	41.8	42.5	43.6	43.6	45.2	57.3	55.4	50.0	-10
Texas.....	155.1	154.3	153.4	157.8	157.8	160.2	164.7	171.0	169.7	155.3	168.5	+ 1
Utah.....	13.4	12.5	11.4	13.0	14.8	15.5	16.0	16.5	13.1	13.4	17.3	- 5
Vermont.....	4.6	3.3	3.3	3.4	3.8	4.6	5.3	5.6	4.8	5.1	5.4	+ 4
Virginia.....	61.7	60.2	61.1	63.5	66.4	69.5	71.7	72.3	65.2	59.3	65.6	+10
Washington.....	42.6	39.3	38.4	40.9	43.6	47.0	49.5	51.6	51.8	54.4	52.7	- 2
West Virginia.....	19.2	17.7	18.5	18.0	19.4	21.1	22.7	23.3	24.0	21.1	20.4	+14
Wisconsin.....	59.6	56.5	55.3	54.4	57.3	64.7	70.4	72.3	58.2	56.9	65.9	+10
Wyoming.....	5.8	5.0	4.7	5.1	6.6	7.4	8.1	8.7	7.5	7.8	9.0	- 3

Source: Department of Labor.

<sup>1</sup> Includes a small number of employees in mining.<sup>2</sup> Not available.<sup>3</sup> Revised series; not strictly

comparable with previously published data.

<sup>4</sup> Change of less than one-half of 1 percent.



## CONSTRUCTION REVIEW

47

Table 39.--Contract Construction: Employment in Selected Areas

Percent change, July 1955-56	Area	Number of employees . (in thousands)										Percent change, July 1955-56	
		1955	1956							1953	1954		1955
		Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	July	July		July
+ 4	Albany-Schenectady-Troy, N. Y. ....	6.9	6.3	5.8	5.9	6.2	6.9	7.3	8.0	7.9	8.4	7.3	+10
0	Albuquerque, N. Mex. ....	5.6	5.1	5.1	5.3	5.5	5.5	5.4	5.5	5.3	4.8	6.3	-13
-12	Atlanta, Ga. ....	19.5	19.1	19.6	19.6	20.3	21.0	21.8	21.2	16.3	14.2	19.7	+ 8
+ 6	Baltimore, Md. ....	44.9	42.5	42.0	43.2	46.1	46.6	47.1	45.4	39.3	37.7	43.3	+ 5
+ 1	Baton Rouge, La. ....	6.0	6.2	6.0	6.1	6.3	6.2	6.6	6.9	(1)	6.0	5.5	+25
+ 4	Binghamton, N. Y. ....	2.4	2.0	2.0	2.0	2.4	2.8	3.1	3.1	3.5	3.1	3.0	+ 3
--	Birmingham, Ala. ....	11.1	10.5	10.3	10.4	11.1	11.9	12.2	12.3	11.6	10.5	12.1	+ 2
+ 7	Boise, Idaho. ....	1.5	1.4	1.3	1.4	1.5	1.6	1.7	1.9	2.4	1.8	1.6	+19
+ 1	Boston, Mass. ....	46.8	42.1	41.8	43.1	47.0	53.1	57.2	58.5	47.1	41.2	51.2	+14
+ 9	Bridgeport, Conn. <sup>2</sup> ....	5.5	4.9	4.6	4.8	5.3	5.6	6.0	6.3	5.5	6.0	6.3	0
+11	Buffalo, N. Y. ....	20.1	18.3	16.9	16.8	19.1	21.9	23.4	24.0	21.0	21.9	23.2	+ 3
+11	Casper, Wyo. ....	.7	.7	.8	.9	1.0	1.2	1.3	1.3	1.2	1.5	1.2	+ 8
+ 6	Charleston, S. C. ....	2.9	2.6	2.8	2.7	2.9	2.9	3.1	3.1	4.6	3.3	2.7	+15
+ 6	Charleston, W. Va. ....	3.5	3.4	3.4	3.1	3.4	3.7	3.9	3.9	8.3	6.1	4.0	- 3
+ 1	Charlotte, N. C. ....	5.0	4.8	4.8	5.0	5.2	5.2	5.4	5.4	6.2	6.5	5.2	+ 4
--	Chattanooga, Tenn. ....	3.9	3.6	3.6	3.7	3.9	3.8	3.5	3.7	5.5	4.7	5.1	-27
+10	Chicago, Ill. ....	117.1	114.0	112.6	117.0	125.8	132.0	138.3	138.7	117.5	116.8	124.4	+11
+ 4	Denver, Colo. ....	18.0	16.9	16.3	16.9	19.3	19.9	21.5	20.7	17.8	14.3	19.8	+ 5
+ 2	Des Moines, Iowa ....	4.7	4.2	4.1	4.4	5.2	5.7	6.2	6.2	4.6	6.0	5.6	+11
+14	Detroit, Mich. ....	63.0	60.2	59.9	57.4	57.0	59.6	61.5	63.2	60.9	71.8	61.0	+ 4
+ 6	Duluth, Minn. ....	2.4	2.2	2.0	1.9	2.0	2.2	2.5	2.7	2.7	2.5	2.2	+23
- 3	Evansville, Ind. <sup>3</sup> ....	3.8	3.6	3.5	3.6	3.9	4.1	4.2	4.4	3.3	4.0	4.4	0
- 6	Fargo, N. D. ....	1.7	1.6	1.4	1.4	1.7	2.1	2.3	2.3	2.1	2.2	2.2	+ 5
-14	Fort Wayne, Ind. ....	2.8	2.7	2.4	2.7	2.9	3.1	3.4	3.6	3.8	3.3	3.1	+16
- 2	Great Falls, Mont. ....	1.1	1.1	1.1	1.3	1.6	1.8	1.9	1.8	1.6	1.8	1.9	- 5
(4)	Harrisburg, Pa. ....	7.4	6.5	6.1	6.4	7.7	6.0	8.9	9.2	6.8	8.0	8.4	+10
-15	Hartford, Conn. <sup>2</sup> ....	9.2	8.4	8.0	8.3	9.0	10.3	10.7	10.8	9.5	10.1	9.7	+11
+ 5	Indianapolis, Ind. ....	12.3	11.5	11.1	11.5	12.3	13.3	14.0	14.5	12.8	13.8	14.7	- 1
+12	Jackson, Miss. ....	4.6	3.8	3.5	4.1	4.3	4.2	4.3	4.5	(1)	(1)	5.1	-12
- 8	Jacksonville, Fla. ....	9.2	8.9	8.8	8.7	8.6	9.0	9.4	9.5	7.2	10.4	9.1	+ 4
+ 5	Kansas City, Mo. ....	19.6	19.5	19.0	19.3	19.7	20.0	20.4	20.5	14.9	22.3	21.7	- 6
- 2	Knoxville, Tenn. ....	6.2	5.8	5.6	5.5	5.2	5.4	6.1	6.5	12.7	14.0	9.2	-29
+15	Lewiston, Maine ....	1.4	1.1	1.1	1.0	1.2	1.3	1.5	1.6	1.2	1.2	1.5	+ 7
- 2	Little Rock-N. Little Rock, Ark. ..	5.5	5.6	4.7	5.0	5.4	5.4	5.5	5.6	5.5	4.9	6.6	-15
- 4	Los Angeles, Calif. ....	112.4	122.7	128.5	133.2	132.7	135.5	138.7	138.6	122.8	117.5	130.4	+ 6
+ 1	Louisville, Ky. ....	13.0	11.2	11.0	11.6	12.3	13.7	14.2	14.4	(1)	16.8	15.0	- 4
- 2	Manchester, N. H. ....	1.9	1.8	1.8	1.8	1.8	2.1	2.3	2.6	1.5	1.9	2.2	+18
+ 7	Memphis, Tenn. ....	12.1	11.5	10.7	11.1	11.2	11.7	11.8	11.7	10.6	11.0	12.0	- 3
-15	Miami, Fla. ....	24.2	22.3	21.6	21.1	21.0	22.4	23.7	24.8	18.6	20.9	25.0	- 1
- 6	Milwaukee, Wis. ....	22.4	21.5	21.3	20.9	21.8	23.3	24.8	24.9	(1)	19.6	23.1	+ 8
-10	Minneapolis-St. Paul, Minn. ....	26.0	24.6	24.1	24.7	27.9	30.5	31.7	33.1	30.5	28.4	30.4	+ 9
+ 1	Mobile, Ala. ....	4.4	4.5	4.6	4.5	4.6	4.7	4.7	4.7	5.3	2.1	4.6	+ 2
- 5	Nashville, Tenn. ....	7.2	7.1	7.2	7.8	8.3	8.4	7.4	6.9	9.3	7.5	7.8	-12
+ 4	New Bedford, Mass. ....	1.7	1.3	1.3	1.4	1.5	1.6	1.9	1.8	1.4	1.6	1.7	+ 6
+10	New Britain, Conn. <sup>2</sup> ....	1.2	1.1	1.1	1.1	1.3	1.4	1.4	1.5	1.4	1.3	1.3	+15
- 2	New Haven, Conn. <sup>2</sup> ....	5.8	5.6	5.6	5.7	6.1	6.5	6.8	6.9	5.9	6.4	6.5	+ 6
+14	New Orleans, La. ....	15.7	15.9	15.2	15.1	15.3	15.2	13.3	14.3	19.8	21.8	17.4	-18
+10	New York-Northeastern N. Jersey: ..	220.5	199.3	199.9	206.1	216.6	227.2	237.9	(1)	(1)	215.9	228.9	--
- 3	Newark-Jersey City, N. J. <sup>2</sup> ....	29.7	26.4	25.6	25.9	27.7	29.8	31.2	31.7	30.6	28.1	31.7	0
strictly	Paterson, N. J. ....	20.9	18.8	19.4	19.6	21.5	20.2	26.4	27.4	(1)	22.3	22.8	+20
	Perth Amboy, N. J. ....	7.1	6.0	6.4	6.6	7.3	7.3	7.9	8.7	(1)	6.2	6.9	+26
	Nassau-Suffolk Counties, N.Y. ..	28.6	24.4	25.3	27.3	27.5	31.2	31.4	31.8	25.5	30.4	32.8	- 3
	New York, N. Y. ....	112.7	106.0	106.7	109.9	113.4	117.5	118.9	118.6	95.2	108.8	111.7	+ 6
	Westchester County, N. Y. ....	16.2	13.2	12.3	12.5	14.3	15.4	16.9	17.0	(1)	16.6	18.3	- 7

See footnotes at end of table.

## CONSTRUCTION REVIEW

Table 39.--Contract Construction: Employment in Selected Areas--Continued

Area	Number of employees (in thousands)											Percent change, July 1955-56
	1955	1956							1953	1954	1955	
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	July	July	July	
Norfolk-Portsmouth, Va.....	10.3	10.0	10.1	10.5	10.9	11.5	12.3	12.4	13.5	12.1	11.2	+11
Oklahoma City, Okla.....	10.0	9.8	9.7	10.4	10.7	10.6	11.0	11.2	9.4	10.0	11.2	0
Omaha, Nebr.....	7.1	7.0	6.5	6.7	7.3	7.8	8.0	8.1	9.2	9.0	7.9	+3
Phoenix, Ariz.....	10.1	10.1	9.8	9.6	9.6	9.8	10.0	10.0	8.1	7.9	10.2	-2
Pittsburgh, Pa.....	41.8	39.2	39.5	41.4	45.3	46.0	47.9	45.6	42.2	38.4	45.6	0
Portland, Maine.....	3.3	2.8	2.6	2.5	2.8	3.5	4.1	4.3	4.3	4.2	4.2	+2
Portland, Oreg.....	13.0	11.8	11.1	12.0	12.5	13.3	14.5	15.1	15.1	13.3	15.3	-1
Providence, R. I.....	14.4	12.7	13.1	13.5	15.3	16.0	16.9	16.9	13.7	13.8	15.7	+8
Racine, Wis.....	2.0	1.9	1.9	1.9	2.1	2.3	2.5	2.5	(1)	2.1	2.1	+19
Reno, Nev.....	2.1	1.9	1.8	2.2	2.4	2.4	2.3	2.1	1.7	2.4	2.4	-13
Richmond, Va.....	11.1	10.5	11.0	11.3	12.0	12.4	13.0	13.0	11.4	10.0	11.5	+13
Rochester, N. Y.....	9.9	8.5	8.1	8.3	9.0	9.2	10.8	11.3	9.2	10.2	11.0	+3
Rockford, Ill. <sup>2</sup> .....	3.7	3.3	3.2	3.4	4.1	4.3	4.6	(1)	3.2	3.7	4.3	--
St. Louis, Mo.....	33.8	32.1	30.5	32.3	33.6	33.9	35.4	(1)	(1)	44.2	38.6	--
Salt Lake City, Utah.....	8.2	7.8	7.1	8.0	8.8	8.9	9.5	9.6	7.3	7.7	9.8	-2
San Diego, Calif.....	12.2	12.5	12.6	12.9	13.3	13.5	13.8	14.0	14.3	11.9	13.3	+5
San Francisco-Oakland, Calif.....	60.1	54.2	58.4	59.1	61.1	62.2	63.4	58.7	54.8	57.7	63.1	-7
San Jose, Calif.....	9.7	9.0	9.7	10.1	10.8	11.2	11.6	10.9	7.8	9.8	10.8	+1
Savannah, Ga.....	2.5	2.5	2.8	2.8	3.1	3.3	3.7	3.6	4.5	2.8	3.4	+6
Seattle, Wash.....	13.5	12.6	12.7	13.1	14.2	15.2	15.7	16.2	13.9	13.7	15.7	+3
Sioux Falls, S. D.....	1.5	1.3	1.2	1.2	1.6	1.7	2.0	2.1	(1)	(1)	2.3	-9
South Bend, Ind.....	3.0	2.8	2.8	2.9	3.2	3.5	3.6	3.7	3.8	3.2	4.0	-8
Spokane, Wash.....	3.5	2.9	2.7	3.0	3.8	4.7	5.5	5.8	4.6	5.0	5.8	0
Springfield-Holyoke, Mass.....	5.7	5.0	4.9	5.0	5.6	6.6	6.9	6.9	4.7	5.5	5.9	+17
Stamford, Conn. <sup>2</sup> .....	3.8	3.5	3.4	3.5	3.7	3.8	3.9	4.1	3.4	3.5	4.0	+3
Syracuse, N. Y.....	5.9	5.6	5.3	5.5	6.0	7.0	7.6	8.1	7.7	8.2	6.7	+21
Tacoma, Wash.....	4.3	4.0	4.0	4.1	4.1	4.0	4.0	4.3	4.6	4.1	4.6	-7
Tampa-St. Petersburg, Fla.....	13.9	14.1	13.6	14.1	14.0	14.1	14.3	14.5	12.8	13.0	13.3	+9
Topeka, Kans.....	3.3	3.0	2.9	3.3	3.8	4.0	4.2	4.5	3.1	3.0	3.9	+15
Trenton, N. J.....	3.4	3.0	3.2	3.3	3.5	3.8	4.1	4.5	(1)	4.6	3.8	+18
Tucson, Ariz.....	4.7	4.6	4.7	4.9	5.0	5.3	5.7	5.7	4.0	3.7	4.3	+33
Tulsa, Okla.....	8.1	7.8	7.8	8.3	8.4	9.1	8.7	9.5	8.1	8.7	8.9	+7
Utica-Rome, N. Y.....	3.2	2.8	2.6	2.8	3.3	4.0	4.2	4.6	3.8	3.9	3.3	+39
Washington, D. C.....	45.2	43.0	43.1	43.8	45.5	46.5	46.7	46.7	40.8	39.3	45.2	+3
Waterbury, Conn. <sup>2</sup> .....	2.1	1.9	1.8	1.8	1.9	2.0	2.1	2.2	2.0	2.0	2.2	0
Wheeling-Steubenville, W. Va.....	4.5	4.1	4.4	4.1	4.4	4.8	4.7	(1)	4.4	4.0	4.7	--
Wichita, Kans.....	6.9	6.5	6.1	6.6	6.9	7.4	7.8	7.9	7.6	7.6	8.6	-8
Worcester, Mass.....	3.2	2.8	2.8	2.8	2.9	3.5	3.6	3.7	4.1	3.6	2.9	+28

Source: Department of Labor.

<sup>1</sup> Not available.<sup>2</sup> Includes a small number of employees in mining.<sup>3</sup> Data revised from January

1955 because area was redefined to include not only Vanderburgh Co., Ind., but also Henderson Co., Ky.

<sup>4</sup> Data revised from January 1953.

Revised figures for months not shown here are available on request.

# CONSTRUCTION REVIEW

49

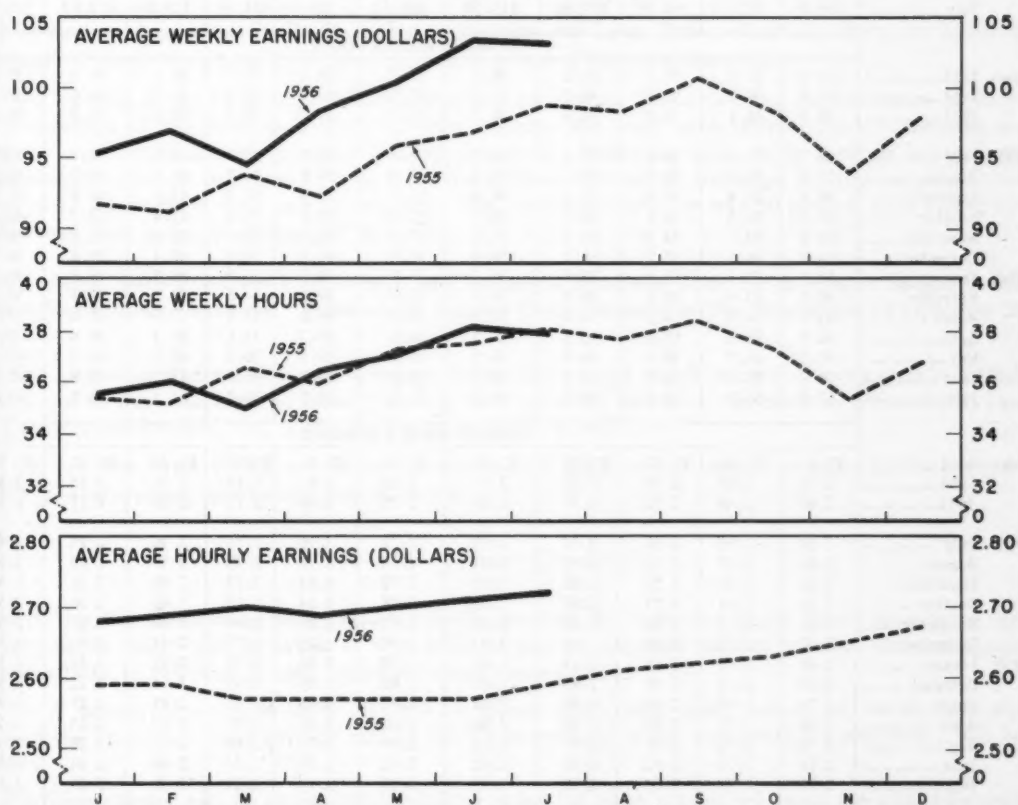
**Table 40.—Contract Construction: Indexes of Aggregate Weekly Man-Hours**  
(1947-49=100)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
1948 .....	89.6	81.3	86.7	95.0	102.2	111.9	115.1	117.3	116.2	113.3	106.6	105.4	103.4
1949 .....	94.2	88.9	89.2	95.0	103.1	106.8	110.5	114.2	111.5	111.4	104.4	94.9	102.0
1950 .....	84.6	79.5	83.7	95.8	106.1	116.7	122.1	129.5	126.1	128.9	123.9	112.7	109.1
1951 .....	106.4	99.3	105.4	116.9	126.4	131.8	137.7	141.1	138.5	139.8	124.2	121.6	124.1
1952 .....	111.1	112.3	108.3	117.5	125.4	136.8	138.9	143.2	144.0	139.9	128.2	123.9	127.5
1953 .....	109.1	108.7	109.1	115.8	122.6	130.4	132.0	137.2	131.7	136.7	126.7	117.2	123.1
1954 .....	95.5	102.8	106.4	113.5	120.3	128.0	131.4	134.0	128.6	128.6	123.3	114.4	118.9
1955 .....	101.4	98.6	108.4	115.5	129.3	136.5	144.1	145.1	148.5	140.8	128.2	124.3	126.7
1956 .....	112.0	113.0	114.0	128.1	140.0	154.4	155.4						

Source: Department of Labor.

Chart 14

## Hours and Earnings of Workers In Contract Construction



SOURCE: DEPARTMENT OF LABOR

CONSTRUCTION REVIEW C.D.56-10-0

## CONSTRUCTION REVIEW

Table 41.--Contract Construction: Hours and Gross Earnings of Construction Workers

Period	All construction	Building construction							Nonbuilding construction		
		All building contractors	General contractors	Special trades contractors					All non-building	Highway and street	Other non-building
				All special trades	Plumbing and heating	Painting and decorating	Electrical work	Other trades			
AVERAGE WEEKLY EARNINGS											
Year: 1953.....	\$91.61	\$91.76	\$87.75	\$94.79	\$98.30	\$87.10	\$111.61	\$91.04	\$90.27	\$85.28	\$93.85
1954.....	93.98	94.12	89.41	97.38	102.71	90.39	112.71	93.19	92.86	86.88	97.36
1955.....	95.94	96.03	90.22	100.83	106.68	94.38	116.82	96.21	94.87	91.05	98.50
1955: July .....	98.68	98.95	92.00	103.60	108.39	97.02	118.31	100.64	99.36	97.22	101.18
August .....	98.14	97.99	92.23	102.03	107.34	96.72	118.60	97.73	99.01	96.75	101.15
September .....	100.61	100.23	93.61	105.28	109.80	99.25	120.90	101.28	102.29	102.13	102.75
October .....	98.10	98.01	91.55	102.76	108.96	97.30	121.30	97.54	99.36	96.90	101.40
November.....	93.81	94.04	88.24	98.28	105.28	91.58	117.43	92.89	92.64	89.21	95.76
December.....	97.99	98.19	92.11	102.93	109.42	96.26	122.00	97.23	94.95	87.47	101.12
1956: January .....	95.41	96.17	88.75	101.10	109.16	94.24	120.26	94.58	93.17	85.19	98.43
February .....	96.84	97.27	90.30	102.03	107.82	94.92	122.36	96.88	94.43	86.14	99.85
March .....	94.50	95.15	87.98	99.81	108.58	95.26	120.12	93.01	91.88	84.90	96.38
April.....	98.19	99.00	92.20	103.82	108.00	95.57	120.74	100.04	94.86	88.65	100.10
May.....	100.44	100.74	93.96	105.62	111.45	99.62	122.22	101.44	99.31	94.16	103.86
June.....	103.25	103.42	96.42	108.38	113.00	101.24	124.66	104.80	104.90	102.49	106.75
July .....	103.09	102.95	96.26	107.88	113.58	100.61	124.03	104.23	104.83	102.93	106.37
AVERAGE WEEKLY HOURS											
Year: 1953.....	37.7	37.0	37.5	36.6	38.1	34.7	39.3	35.7	40.3	41.2	39.6
1954.....	37.0	36.2	36.2	36.2	37.9	34.5	38.6	35.3	40.2	40.6	39.9
1955.....	36.9	36.1	35.8	36.4	38.1	34.7	39.2	35.5	40.2	41.2	39.4
1955: July .....	38.1	37.2	36.8	37.4	38.3	35.8	39.7	37.0	42.1	43.4	40.8
August .....	37.6	36.7	36.6	36.7	38.2	35.3	39.8	35.8	41.6	43.0	40.3
September .....	38.4	37.4	37.0	37.6	38.8	35.7	39.9	37.1	42.8	44.6	41.1
October .....	37.3	36.3	35.9	36.7	38.5	35.0	39.9	35.6	41.4	42.5	40.4
November.....	35.4	34.7	34.2	35.1	37.2	33.3	38.5	33.9	38.6	39.3	38.0
December.....	36.7	36.1	35.7	36.5	38.8	34.5	40.0	35.1	39.4	39.4	39.5
1956: January .....	35.6	35.1	34.4	35.6	38.3	33.9	39.3	33.9	38.5	38.9	38.3
February .....	36.0	35.5	35.0	35.8	37.7	33.9	39.6	34.6	38.7	38.8	38.7
March .....	35.0	34.6	34.1	34.9	37.7	33.9	39.0	33.1	37.5	37.4	37.5
April.....	36.5	36.0	35.6	36.3	37.5	34.6	39.2	35.6	39.2	39.4	39.1
May.....	37.2	36.5	36.0	36.8	38.3	35.2	39.3	36.1	40.7	41.3	40.1
June.....	38.1	37.2	36.8	37.5	38.7	35.9	39.7	36.9	42.3	43.8	40.9
July .....	37.9	36.9	36.6	37.2	38.5	35.3	39.5	36.7	42.1	43.8	40.6
AVERAGE HOURLY EARNINGS											
Year: 1953.....	\$2.43	\$2.48	\$2.34	\$2.59	\$2.58	\$2.51	\$2.84	\$2.55	\$2.24	\$2.07	\$2.37
1954.....	2.54	2.60	2.47	2.69	2.71	2.62	2.92	2.64	2.31	2.14	2.44
1955.....	2.60	2.66	2.52	2.77	2.80	2.72	2.98	2.71	2.36	2.21	2.50
1955: July .....	2.59	2.66	2.50	2.77	2.83	2.71	2.98	2.72	2.36	2.24	2.40
August .....	2.61	2.67	2.52	2.78	2.81	2.74	2.98	2.73	2.38	2.25	2.51
September .....	2.62	2.68	2.53	2.80	2.83	2.78	3.03	2.73	2.39	2.29	2.50
October .....	2.63	2.70	2.55	2.80	2.83	2.78	3.04	2.74	2.40	2.28	2.51
November.....	2.65	2.71	2.58	2.80	2.83	2.75	3.05	2.74	2.40	2.27	2.52
December.....	2.67	2.72	2.58	2.82	2.82	2.79	3.05	2.77	2.41	2.22	2.56
1956: January .....	2.68	2.74	2.58	2.84	2.85	2.78	3.06	2.79	2.42	2.19	2.57
February .....	2.69	2.74	2.58	2.85	2.86	2.80	3.09	2.80	2.44	2.22	2.58
March .....	2.70	2.75	2.58	2.86	2.88	2.81	3.08	2.81	2.45	2.27	2.57
April.....	2.69	2.75	2.59	2.86	2.88	2.82	3.08	2.81	2.42	2.25	2.56
May.....	2.70	2.76	2.61	2.87	2.91	2.83	3.11	2.81	2.44	2.28	2.59
June.....	2.71	2.78	2.62	2.89	2.92	2.82	3.14	2.84	2.48	2.34	2.61
July .....	2.72	2.79	2.63	2.90	2.95	2.85	3.14	2.84	2.49	2.35	2.62
Percent change, July 1955 to 1956											
Avg. wkly. earnings ..	+4.5	+4.0	+4.6	+4.1	+4.8	+3.7	+4.8	+3.6	+5.5	+5.9	+5.1
Avg. wkly. hours .....	- .5	- .8	- .5	- .5	+ .5	-1.4	- .5	- .8	0	+ .9	- .5
Avg. hrly. earnings....	+5.0	+4.9	+5.2	+4.7	+4.2	+5.2	+5.4	+4.4	+5.5	+4.9	+5.6

Source: Department of Labor.



On September 20, 1956, the White House announced the following actions taken by home-financing agencies of the Government to spur new home construction and facilitate the purchase of low-cost housing.

## **FHA Reduced Downpayment Requirements for Homes Appraised at \$9,000 or Less.** (Federal Register, Vol. 21, No. 185, September 22, 1956, p. 7213.)

The Federal Housing Administration reduced the minimum downpayment required on homes appraised at \$9,000 or less from 7 percent to 5 percent of value, thereby increasing to \$8,550 the maximum allowable mortgage on properties which have been approved for mortgage insurance prior to the beginning of construction or on properties which have been completed for one year or more. The downpayment for properties completed less than one year and not approved for mortgage insurance prior to the beginning of construction was reduced from 12 percent to 10 percent, thereby increasing the maximum allowable mortgage to \$8,100.

These revised downpayment requirements affect 1- to 4-family dwellings covered by Sec. 203(b) Sales Housing Loans, and single-family houses in outlying areas for families of low and moderate income covered by Sec. 203(i) loans. Any outstanding commitments under these two sections, or cases in process, may obtain the benefits of the amended rules. For all other home loans insured by FHA, the current downpayment requirements remain in force. (See Construction Review: Vol. 1, No. 8, August 1955, pp. 53-54; Vol. 1, No. 12, December 1955, p. 49; and Vol. 2, No. 5, May 1956, p. 55.)

## **HLDB Increased Amount of Credit Available to Savings and Loan Associations for Mortgage Lending Purposes.** (Federal Home Loan Bank Board press release issued September 20, 1956.)

The Federal Home Loan Bank Board authorized its district banks to relax the limitation on ordinary borrowings of the more than 4,400 member savings and loan associations, thus increasing the amount of credit available for mortgage lending purposes. Under the new ruling, member institutions are permitted to borrow from the Federal Home Loan Bank System for mortgage lending an amount not to exceed 12.5 percent of their savings capital. The previous limitation was 10 percent (see Construction Review, Vol. 2, No. 1, January 1956, p. 52).

## **FNMA Reduced Stock-Purchase Requirement, and Increased Purchase Price for Mortgages Bought Under Advance-Commitment Contracts.** (Statement on Housing Credit, released by The White House on September 20, 1956.)

The amount of Federal National Mortgage Association stock which sellers of mortgages to FNMA are required to buy was reduced from 2 percent to 1 percent, which is the minimum permitted by law (see Construction Review, Vol. 2, No. 9, September 1956, p. 48).

The price at which FNMA will issue advance commitments to buy home mortgages for its secondary mortgage operations was raised from 92 to 94.

**Eligibility for VA direct home loans broadened**--On October 10, 1956, the White House announced the following steps which will be taken by the Administrator of Veterans Affairs to make more mortgage money available to veterans in rural areas and small communities.

(1) A number of areas formerly eligible for direct Government home loans, but which were deactivated two years ago when private capital for VA-guaranteed loans was generally available, will be reopened.

(2) Direct loans will be authorized in eligible areas (a) when guaranteed loans are available only on restrictive credit terms (i.e., when the lender's terms would "work a hardship" on the veteran), and (b) if the veteran proposes to buy a home located on a farm site. Formerly, direct loans were made only to veterans in rural areas and small communities who were unable to obtain private mortgage financing under any terms (see Construction Review, Vol. 2, No. 4, April 1956, pp. 47-48).

## *Productivity in Steel*

This new and timely bulletin—*Man-Hours Per Unit of Output in the Basic Steel Industry, 1939-55*—presents productivity trends in the basic steel industry (blast furnaces, steel works and rolling mills, and electro-metallurgical products). A comprehensive study of long-term trends in the industry, it also has sections on:

- *Factors affecting productivity change*
- *Total employment and production-worker employment*
- *Concepts and limitations*

A technical note on sources of the data and methods used is also included.

Orders may be sent to the Superintendent of Documents, Washington 25, D. C., or to any of the Bureau of Labor Statistics Regional Offices (see inside front cover of *Construction Review* for addresses). Price, 30 cents a copy.

*Please make check or money order payable to Superintendent of Documents.*

*An article summarizing trends in unit man-hours in the basic steel industry is scheduled for the November issue of the Monthly Labor Review.*

